

TWISTERS IN TWO CITIES: STUCTURAL  
RITUALIZATION THEORY AND DISASTERS

By

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RITUALIZATION THEORY AND DISASTERS

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Abstract: The sociological study of disaster has increased in methodological and conceptual complexity since its inception, but despite this progress there persists a need for further theoretical development in order to advance understanding of disasters. To address this need, this work applied structural ritualization theory to two prominent tornado disasters to uncover new ways to conceptualize and study disaster processes. Structural ritualization theory (SRT) emphasizes the importance of ritual in providing order, value, direction, and cohesion – among other things – to individuals and groups. Rituals are defined as ritualized symbolic practices, which are schema driven action repertoires with symbolic and emotional meaning. One line of research within SRT examines the effects of disturbances to performances of RSPs, which are framed as patterns of disruption, deritualization, and reritualization. This model was applied to the cases of the May 22, 2011 tornado in Joplin, Missouri, and the May 20, 2013 tornado in Moore, Oklahoma. Qualitative content analysis was utilized on 1,793 news media articles from local and regional outlets covering each tornado for periods of three months following each event. Patterns of disruption, deritualization, and reritualization were identified in each community throughout the sampling window. Implications for SRT as an alternative disaster framework, empirical and conceptual contributions to SRT as a perspective, as well as potential for synthesizing this framework into existing lines of inquiry in disaster literature were also identified.

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## CHAPTER I

### INTRODUCTION AND CONTEXT

*“The old joke that you can tell someone was from the Midwest if they went to the porch with their video camera when the sirens sounded isn’t funny anymore.”*

It was that time of year again, evidenced by pomp and circumstance figuratively and literally in the air. For the students, parents, and extended family of Joplin High School, the day had finally come for the students to take their largest leap thus far into adulthood. The rite of passage was well under way; speeches were delivered with conviction, most were focused on the accomplishment of high school signifying a beginning of things to come, and less of an end. Smiles crept across faces, students who no longer had to endure the monotony of school, but parents too, because their kid had made it to the finish line. Some of them were probably keeping one eye on the sky, as you’re trained to do living in the southwest on days like that day. It was overcast that particular afternoon, and the time of year that ushers in graduation is also the harbinger of chaotic storms, sometimes even tornadoes. There were plenty of overcast days though, so surely it was nothing to worry about on that day – besides, it was time to celebrate.

For those not invested in the graduation ceremony, the day was playing out like a typical Sunday. Church in the morning (or not), lunch, possibly a nap in the afternoon, then another round of church, or perhaps a night on the town. Some might have cooked out in the back yard while the children played with the dog. Pickup baseball games were played at the park, some families watched a matinee at the movie theater. Others went out for dinner at one of the local places for one last hurray before the next work week began; maybe some shopping at the mall or one of the smaller strip malls around town. As the afternoon progressed the restaurants became unusually busy, no doubt from all of the students and families continuing traditions of celebration following the graduation ceremonies. May 22, 2011, for most, was a good day.

Just after 5:30 that evening that all changed, heralded by the wail of the city's tornado sirens. For some, the sirens were an indicator to go outside and evaluate conditions, because sirens had gone off plenty of times before without cause for concern. But something was different this time, the sky was darker, the wind howled with an unusual ferocity; this storm was to be taken seriously. The tornado touched down in residential areas first, and the residents of Joplin did what they could: some went to the shelter that had sat empty until then, they huddled in closets, covered themselves with blankets, hid in bathtubs, or flipped mattresses over themselves for any kind of defense.

By the time the tornado reached the heart of the city it had increased in size and strength so that there was no doubt for anyone this time. Rather than go outside and look at the sky, people in restaurants or stores took what action they could to survive. Some individuals took charge and met exceptional circumstances with exceptional bravery. Christopher Lucas, for example, ushered the employees and patrons of the Pizza Hut he

managed into the restaurant's freezer, lashed his body to the door, and held it closed as long as he could. He did not survive, but the nearly 20 others that he protected did. Numerous others in the tornado's path took similar action, they huddled in the best places they could find, led by an employee or a stranger to a back room or seemingly sturdy area, and hoped for the best.

When the storm had passed, those that were able emerged to find an unfamiliar scene. Entire neighborhoods were flattened, notable storefronts which served as landmarks in the everyday hustle were absent. The city was made physically different by the experience. More jarring than the changed landscape for those trying to recalibrate to their new surroundings were the screams and cries for help from others who were trapped beneath debris that formerly served as a home or business. The people in the city were made different, too. Sparked by the scope of the calamity before them, many took immediate action. Anyone that was free of debris became a first responder for those who were stuck. Trucks that escaped damage were drafted as makeshift ambulances - or coroner's vehicles.

Search and rescue activities stretched into the night. First responders from precincts throughout the region volunteered and joined the citizenry who were already contributing in any way they could. The priority for most on that first night was tending to those that could be saved. The city's largest hospital had been damaged, but it was still functional. Trucks and ambulances brought wounded in throughout the evening, too many for the hospital's staff and facilities to handle. The injured lined the hallways, they were given blankets to stay warm after a quick evaluation to prioritize who needed attention first. Volunteers, not all of whom were associated with the hospital, worked to keep people as comfortable as possible, but it was an uphill battle. The battle against the disruption of the storm was not localized to

the hospital, of course, the rest of the community would also work diligently to sift through the remnants the day that until then was normal.

Two years later, almost to the day, in Oklahoma, the people of Moore carried out an otherwise typical Friday with a heightened awareness of weather conditions. The spring of 2013 had already brought about several severe storms, and forecasts for May 20 indicated that more could be on the way. But, as is the way of life in tornado alley, people went about their day as close to normal as possible. There were plenty of things to do at work before the weekend. Teachers and students were anticipating the last few activities at school before the end of the year. The day wasn't entirely normal, though, as the afternoon developed so too did the storm clouds in the sky. This prompted some to leave work early, especially parents, who thought it might be best to pull their child out of school early, just in case. Moore had seen more than its share of big storms, and many of its citizens still remembered the tornadoes of 1999 and 2003; those experiences made them take days like that Friday more seriously.

Just before 3:00 in the afternoon the worst of those concerns came to bear when the sirens signaled their alarm; another tornado was on its way. Students at Plaza Towers knew what to do though, another aspect of growing up in the Midwest. Teachers and school officials sprang into action like they had done countless times before practicing for a time like this one, and the students performed the dance of motions they had rehearsed during all of those drills, only this time it was for real. Heads were down, huddled at the base of the central wall in the room away from windows. All that was left to do was hold on tight and hope that this time, like many of the times before, the storm would pass them by without

harm. The students and teachers in Plaza Towers knew what they were supposed to do, and they did it flawlessly.

*“You saw things you should not have to see.”*

Unfortunately, on that day it wouldn’t matter what they did. The tornado ripped through the school, and took seven children with it. Neighborhoods around the school were leveled, and more lives were claimed. The tornado continued through Moore, destroying homes, businesses, restaurants, and the medical center for the area.

Not unlike Joplin two years before, when the people of Moore emerged from their shelters after the storm they were met by a different town than the one they knew before. Some found it difficult to find where their home used to be because there were no landmarks to navigate with - entire neighborhoods were simply gone. First responders and citizens alike worked to pull people from the wake of the tornado’s destruction. With the medical center destroyed, triage areas were established to stabilize the most injured until they could be transported to more secure facilities. Images of these triage units and covered deceased were broadcast on national news that evening, which signaled to all just how dire the situation was in Moore that Friday afternoon. Moore had experienced tornadoes before, but that fact didn’t ease the calamity found that particular day.

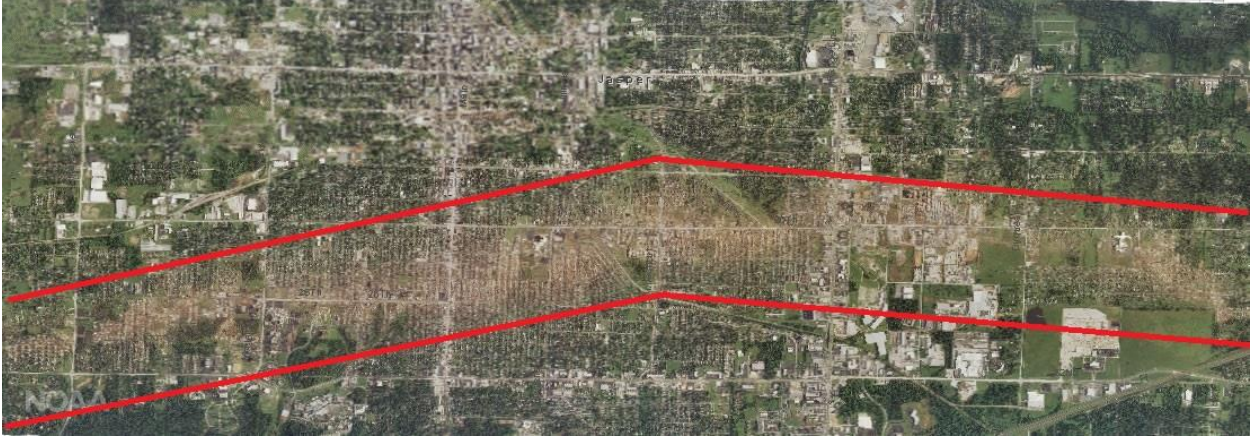
Before these tornadoes developed, the communities of Joplin and Moore were in the midst of typical days. As described in previous sections, there were numerous social functions and processes that were being conducted and performed by each segment of each community. For these communities’ normal activities were rites of passage including high school graduation or completing another year of school, or even more mundane activities

which may be conducted on any given Friday or Sunday in numerous communities. In many ways these serve as prototypical examples of what are referred to as disasters; “usual” activities disturbed by distinct and profound disruption. Naturally, when normalcy is so saliently encroached upon by environmental or social forces, individuals from all walks of life take notice, perhaps some lend assistance, others seize opportunities for more nefarious purposes, and others still seek further understanding about what times like those reveal about individuals, communities, and society more generally. The endeavors of this work were directed toward the latter of these pursuits.

### **The Joplin and Moore Tornadoes**

By all metrics, the tornadoes experienced by the communities of Joplin, Missouri and Moore, Oklahoma were substantial. Both tornadoes inflicted EF5 level damages on each city, which was considerable enough to be visible via satellite images (see Figures 1 and 2 below). The storm that struck Joplin, Missouri occurred on May 22, 2011. The tornado touched down at 5:34 PM CST approximately 1.5 miles to the southwest of residential neighborhoods on the edge of Joplin, and tracked north and east for approximately 22 miles, lasting nearly 40 minutes. Winds from the storm were measured above 200 miles an hour, and at its strongest, the tornado was estimated to be a mile wide. The tornado tore through residential and business localities, destroying or damaging thousands of homes, businesses, and other facilities such as hospitals, government buildings, and schools. 158 people were killed, with more than 1,000 injured (Wheatley 2013).

**Figure 1. Satellite Image of the May 22, 2011 Joplin, MO Tornado Damage Path**



Note: Original image obtained from <https://www.noaa.gov/news/blog-remembering-tornado-outbreaks-of-2011>; image modified from original state

The storm that struck Moore, Oklahoma occurred on May 20, 2013. This tornado emerged from a massive storm system, traveled for 17 miles, and lasted nearly 40 minutes. Winds from the Moore tornado also measured above 200 miles an hour, and it was also measured to be over a mile wide at its strongest point. The disaster resulted in 24 direct fatalities and more than 300 injuries, as well as massive devastation and disruption to Moore's infrastructure. The most considerable damage was inflicted on residential areas, with entire neighborhoods being flattened. The Moore Medical Center was damaged to the point of closure. Two schools were destroyed, the Briarwood Elementary School, and the Plaza Towers Elementary school. No injuries occurred at Briarwood, but as recounted above, nearly one-third of the casualties from the tornado occurred at Plaza Towers Elementary (Tornado Facts).



**Figure 2. Satellite Image of the May 20, 2013 Moore, OK Tornado Damage Path**



Note: Original image obtained from <https://extremeplanet.me/tag/may-20-tornado-damage/>; image modified from original state

In many ways these storms and resulting disasters were similar. Damages for these substantial disasters were estimated in the billions. Both involved some of the strongest tornadoes in recent memory in terms of size, wind speeds, and damages to life and property. Both disasters also exhibited several qualities typical to natural disasters (Gill 2007) in that the towns were physically devastated, as described above and depicted in Figures 1-4. Response activities were swift following both events, with first responders establishing search and rescue and improvised medical activities, and community leaders contributing to first response efforts as well as offering resources to those displaced. Individuals within these communities, surrounding regional communities, as well as other actors across the



nation pooled resources and labor to lend support and assistance to response, recovery, and restoration efforts. These events received extensive local, regional, and national news coverage, with images and stories chronicling several dimensions of recovery processes.

**Figure 3. Damage to a Joplin Residential Area (Riedel 2011)**



In addition to experiencing similar tornado events, Joplin and Moore share similarities outside the context of disasters as well. Joplin and Moore are home to approximately 51,000 and 59,000 residents respectively. In addition to size, racial and socioeconomic demographics are very similar between the two cities with both being over 80% white and Republican-leaning politically. About 25% of both Joplin and Moore residents above age 25 have completed a bachelor's degree or higher. The median income of Moore households is approximately \$62,000 annually, slightly higher than Joplin's median



household income of approximately \$42,000 annually. Moore's poverty rate of 9.5% is lower than Joplin's 17.9% poverty rate (Joplin city, Missouri; Moore city, Oklahoma).

**Figure 4. Damage to a Moore Residential Area (Gooch 2013)**



There are key differences between Joplin and Moore in terms of location and history. Moore is adjacent to southern Oklahoma City and Norman, with sprawl from each city resembling interconnected units rather than distinct cities. Joplin, while adjacent to suburban areas (e.g., Webb City, MO), is the largest city in its region. There are potential key differences in terms of political capital and economic resources available to Moore and Joplin due to these regional differences. Further, Moore has experienced other substantial tornado disaster events (i.e., in 1999 and 2003), while Joplin has not. It is possible that

residents in Moore with previous experiences would have different cultural responses to tornadoes given these collective memories of previous events.

### **Beyond Two Twisters**

The calamity brought about by the tornadoes described above is sure to pull at the hearts of the empathetic, which is natural given the sudden upturning or ending of so many lives. But there is tremendous value in applying a sociological lens to these situations as they arise, and learning lessons to carry forward to prevent or mitigate future disasters of this magnitude.

This dissertation will serve as an attempt towards those ends. The descriptions in the previous sections of this chapter were focused on various dynamics of the events themselves, primarily the disruptive and destructive qualities of each storm. The remainder of this work focuses on what came next for each community. In other words, how did these communities return to a more normal state in the wake of such catastrophes?

In pursuit of answering this basic question, this dissertation draws upon and synthesizes two bodies of literature: the sociology of disaster, and structural ritualization theory (SRT; Knottnerus 1997; 2011). Sociologists have long been concerned with disasters of this sort and others. Specifically, the sociology of disasters features extensive focus on the social processes of a given social unit and how they are affected by various hazards, with tornadoes being one example (Fritz 1961; Quarantelli 1985). SRT emphasizes the role of ritual dynamics in providing structure, order, meaning, value, and purpose to the daily lives of individuals and groups. As a theoretical perspective, SRT has tremendous potential to contribute to sociological understanding of disaster, as it provides conceptual framework for understanding behavioral aspects of normal and disrupted states with nuance. This work

serves as an initial exploratory step towards those ends. Chapter two of this dissertation will feature literature reviews for the sociology of disaster, including the treatment of tornadoes as disaster events within that literature, as well as a thorough discussion of SRT, its core concepts, and a review of SRT's application in research.

Chapter three will outline the methodological approach for this work, which utilized a qualitative content analysis methodology to analyze media accounts of recovery processes in Joplin and Moore to showcase ritual dynamics in each context. Chapter four will highlight the results of this analysis, including similarities and divergences of ritual dynamics from each community following the tornadoes. Finally, chapter five will provide commentary on the results, discuss limitations of this study in this form, contributions of this work to SRT and disaster literatures, and outline directions for future research and theory uncovered by this research.

## CHAPTER II

### THEORETICAL FRAMEWORK AND LITERATURE REVIEW

Disaster research has flourished since the mid-twentieth century. In the span of several decades, great strides have been made in understanding how social units - individuals, communities, societies - cope during and after disruptive encounters with hazards of various kinds. Many investigations take the lead set forth by early disaster scholars (e.g., Dynes 1970; Drabek 1986) and approach these issues from organizational, collective behavior, and/or systems perspectives. It is true that empirical studies of disaster have contributed much to our collective knowledge, but many scholars have called for the expansion of existing ideas and development of new theoretical frameworks within disaster literature (Berke, Kartez, and Wenger 1993; Quarantelli 2005; Smith and Wenger 2007; Tierney and Oliver-Smith 2012; Oliver-Smith 2013; Gill and Richie 2018; Perry 2018). These endeavors have included reframing disasters as endogenous social processes and/or noting paradigmatic shifts within the disaster paradigm. This dissertation suggests and demonstrates that disaster social science can benefit from a social psychology perspective—specifically, structural ritualization theory (SRT).

Structural ritualization theory highlights the importance of ritual dynamics in forming meaning, value, and structure to the daily lives of individuals and groups (Knottnerus 1997; 2011). When compared to other theoretical developments in disaster literature – such as conservation of resources (Hobfoll 1988), recreancy (Freudenberg 1993, 2000), social capital (Ritchie 2004; Ritchie and Gill 2007; Aldrich and Meyer 2014), and risk (Tierney 2014) – SRT positions ritual as a fundamental unit of behavior and offers a variety of conceptual tools for understanding ritual dynamics. Ritual dynamics in this context include how rituals are performed by individuals and groups, how these dynamics contribute to the formation and maintenance of social structure at multiple levels, as well as effects of disruptions to such rituals. These conceptual tools position SRT to be useful in a number of contexts, including expanding understanding of disasters and their various impacts.

Emphasis on ritual dynamics positions SRT to offer alternative as well as complementary explanations for better understanding social psychological phenomena in contexts of disaster. In order to explore this potential, SRT provides the theoretical foundation of this dissertation. This chapter will review foundational concepts and literature from the sociology of disaster, with specific attention given to examinations of tornadoes in segments of this literature, followed by an in-depth discussion on the core concepts and research of SRT, including the intellectual history of ritual as a social psychological concept.

## **Disasters**

This section aims to first discuss disasters in conceptual terms followed by a review of the treatment of tornadoes as a within this literature. Initial discussions will focus on

specific elements of disaster literature which will be expanded upon with this analysis by the introduction of structural ritualization theory, which will be discussed in depth in later sections of this chapter. Disasters have traditionally been defined as disruptions to social interactions and the social contexts in which those interactions take place. Early definitions confined these disruptions to specific times and places (Fritz 1961). The key element in early definitions lies in social disruption; the disruptive effects an event has on people and their social interactions are what qualify an event as disaster rather than a weather or hazard event (Fritz 1961; Quarantelli 1985). Kroll-Smith and Couch (1991) developed a conceptualization of disasters using an ecological-symbolic approach, which included notions that disasters also serve to disrupt or sever persons' or groups' (e.g., family, town, city, society) integration with their built and biophysical environment. Biophysical environments are natural surroundings. Built elements of environment may be thought of as artificial modifications to the biophysical environment to accommodate improved lifestyles, such as housing (and other buildings) and infrastructure. The ecological-symbolic approach very simply emphasizes the importance of symbolic components to disruptive processes, especially as they rest within actors' attachment to place (e.g., a person identifying strongly with a specific community).

Disasters may be broadly classified into four categories, with categories determined by etiology. Natural disasters are triggered by nature free of human influence and are typically characterized by damage to the built environment (Kroll-Smith and Couch 1993; Freudenburg 1993; 1997). Natural disasters also tend to foster the development of therapeutic communities, in which community members unite in goal-oriented actions directed towards response and recovery (Drabek 1986; Gill 2007). This

is a strong contrast to technological disasters, which are triggered by human activities, and often involve issues of contamination to the biophysical environment (Erikson 1994). Technological disasters affect communities very differently as well, often fostering the development of corrosive communities lacking cohesion and/or sense of community, due in part to the ambiguous nature of risks associated with contamination (Freudenburg 1993; 1997; Gill 2007). The final two categories make up middle ground entanglements, and conceptualizations of these types are developing. In very general terms these categories are NaTech disasters, which are triggered by natural hazards and exacerbated by human processes, and TechNa disasters, where human processes contribute to occurrences of seemingly natural hazards (Gill and Ritchie 2018).

Regardless of etiology, a substantial proportion of social scientific examinations of disasters have focused on one or more phases in what is commonly referred to as the disaster or emergency management cycle. One parsimonious and ubiquitous conceptualization of a disaster cycle identifies four phases: preparation, response, recovery, and mitigation (Drabek 1986). Preparation refers to processes preceding a disaster event, and would include conditions of readiness as well as behaviors such as evacuation or shelter seeking. Response includes individual and organizational activities in the immediate aftermath of a disaster event, including restoration of essential social infrastructure (e.g., medical facilities, sewage systems, housing, etc.). Recovery then refers to long term processes aimed towards restoring pre-disaster normal conditions. Mitigation occurs in the intermediate phase after an initial disaster event and before another (i.e., if the disaster cycle is conceptualized as cyclical, after recovery and before preparedness). Included in this phase are processes wherein individuals, organizations,



and/or communities engage in resilience-building activities aimed at reducing the impacts of future disaster events.

Disasters, when defined in this way, are cyclical, and while there is utility in dividing and focusing on certain aspects of these processes, there exists consequential uncertainty regarding exact definitions for each phase. More recent works have undermined these concepts by raising important questions about the nature of disasters and their meanings for communities. For instance, Tierney (2014) has provided compelling arguments that the “starting points” of disasters are not necessarily coupled with the onset of a hazard event, but rather are embedded in the social processes that make individuals and groups vulnerable to the hazard to begin with. In other words, “disasters” may be developing long before a salient awareness of these conditions exists and is made salient by a hazard event.

Further, and perhaps more pertinent to this study, are recent empirical works examining the nature of recovery. There have been numerous valuable attempts to quantify recovery (see Chang 2010 for a concise summary and evaluation of some of the ways recovery has been operationalized), with many of the differences lying in quantitative measures and their appropriateness for deeming a group recovered (e.g., economic growth trajectories or pre-disaster economic condition restoration). Others have highlighted the symbolic importance of recovery and called the inevitableness of recovery into question. Gill, Ritchie, and Picou (2016), guided in part by the ecological symbolic approach, highlighted the interconnected nature of ecological recovery with social recovery following the *Exxon Valdez* Oil Spill (EVOS). For many affected by the EVOS, recovery in terms of social processes is tied to resource recovery (e.g., fisheries),

which by many standards remain far from recovered. Rather than “recovering” from the EVOS, affected community members were described as incorporating the experience into their identities moving forward. Additionally, Kroll-Smith, Baxter, and Jenkins (2015) explored meanings of recovery in New Orleans following Katrina. While a different connection to place was experienced by those in New Orleans compared to Cordovans after the EVOS, similar observations about recovery were made, especially regarding issues relating to identity. Recovery, in this case, involved adjusting individual and community identities and incorporating experiences of Katrina into processes moving forward.

There is a more subtle point raised by the previous two articles cited above worthy of further attention. Previous conceptualizations of recovery, in various ways, describe a return to a condition of some sort. These are typically characterized as either a return to pre-disaster conditions by some metric (e.g., economic activities) or the restoration of pre-disaster processes; “recovered” is a state or condition to be attained. This is particularly the case in more recent conceptualizations of recovery as a new normal, where pre-disaster conditions are not necessarily restored but a different state of normalcy is attained or attainable (Abrams, Albright, and Panofsky 2004). Studies highlighted in the previous paragraph reconceptualize recovery as an ongoing and iterative process. Put differently, rather than a process towards a certain end (i.e., the state of recovered), recovery may instead be an open-ended process wherein individuals incorporate disaster experiences into their lives and identities while continuing to live on.

Additionally, these studies emphasized individualized experiences of recovery. This is a further departure from a common thread amongst investigations into disaster

recovery which utilize a systems approach examining communities as a whole. Continuing down this path by shifting in focus from communities as systems towards the lived experiences of individuals affected offers potential to bring in new theoretical perspectives into disaster literature. Such focus could contribute to current understandings of disaster experiences in a complementary, rather than conflictual way. While there are countless microsociological theories concerned with agency and action, structural ritualization theory, which will be described in more depth later in this chapter, is particularly well suited to dealing with how individuals might respond to profound disruptions and/or deritualization in their lives. A brief review of literature exploring tornadoes follows this section before reviewing core principles and research from SRT

### **Tornadoes Within Disaster Literature**

Thus far conceptual frameworks for disaster have been discussed in general terms. This study focused on two specific instances involving tornadoes. This focus resulted primarily from two factors: the exploratory nature of this study and personal interest of the researcher. This dissertation is exploratory in its application of SRT in a new context, as well as in exploring alternative ways to conceptualize disaster cycles. In this sense tornadoes serve as an exemplar of natural disasters, particularly in that there are clearly identifiable aspects of these processes through multiple conceptual lenses; a traditional disaster cycle or SRT being examples. The Joplin and Moore tornadoes in particular were selected due to their cultural significance for the regions in which they occurred, as well as personal interest by the researcher who indirectly experienced aspects of the Joplin tornado. With general concepts of disasters discussed, this section will feature a selected review of tornado literature to determine if there are any particularities regarding

treatment of tornadoes within this body of literature which should be considered within the context of this study.

Disaster research has developed to feature investigations into specific hazards, including natural and technological, as well as comparative analyses bridging multiple hazards. Tornadoes, despite being the focus of early sociological investigations of disaster (Moore 1958; Quarantelli 1987), offer a number of challenges for researchers and practitioners. Generally, these challenges can be categorized as either meteorological or social complexities, which include their short warning phases, substantial physical impacts on community infrastructure, complex warning phases, and extensive recovery efforts.

Meteorologically tornadoes are simultaneously anticipatable and unpredictable. Tornadoes in the United States occur most frequently throughout the Midwest, often referred to as “tornado alley.” Tornadoes are seasonal and occur consistently. They are also unpredictable in that storms can last moments or minutes, with extremely short windows with which to disseminate warning messages and take appropriate sheltering actions. Similarly, tornadoes are unpredictable in their level of strength, with some resulting in no damage and others substantially affecting multiple communities. Further, while anticipatable and frequently occurring, there is simply much that is not known regarding individual and community perceptions and behaviors regarding tornadoes (Lindell, Sutter, and Trainor 2013).

Individual and community response to tornadoes, as others have noted, relies on a combination of environmental, social, and informational cues (Lindell, Sutter, and

Trainor 2013). Problems may arise if any of these cues are seemingly contradictory, or are interpreted differently by different actors. Put differently, emergency managers and community members may interpret weather patterns and/or weather warnings differently based on their training, experience, and interpretations of various environmental and social cues. Social components like these have received substantial attention from researchers in order to enhance resilience and more fully understand the impacts of tornadoes (and other hazards) on individuals and communities.

This section will feature a selected review of literature examining tornadoes specifically in order to further contextualize and identify additional areas of contribution for this work. Trends in social science research on tornadoes may be revealed by examining publications from a prominent social science journal in the area of disasters, *Disasters*. *Disasters* features publications of scientific studies, policy evaluations, or emergency management practices written by researchers and practitioners. While multidisciplinary, it often features articles with focus on social issues relating to natural and technological hazards by emphasizing their interface with human populations. This journal was selected due to its strong impact factor, as well as authorship consisting of a diverse representation of scholars (e.g., sociologists, political scientists, etc.), practitioners, and combinations of both. For this selective review, three decades of articles published from 1986-2016 specifically focusing on tornadoes were examined.

An initial search of *Disasters* catalogue captured all articles in the selected time period including the words “tornado” and/or “tornadoes.” These articles were then screened by examining 1) if the article’s focus was at least in part on tornadoes in the United States and 2) the articles included some form of analysis or meaningful discussion

involving tornadoes. Articles focusing on tornadoes in the United States were selected in order to more clearly understand research and policy trends within the United States. Regarding the second criteria, only articles that featured analysis of tornadoes were included. Articles that were included in initial search results but only featured the words “tornado” and/or “tornadoes” in lists (e.g., “natural hazards, such as tornadoes, earthquakes, hurricanes, etc.”), but lacked analysis, or in titles in citation lists were excluded from this portion of the review.

This process resulted in the selection of 21 articles published between 1987 and 2016. Articles within this sampling window were further examined on the bases of their inclusion of a theoretical framework, their emphasis on the disaster cycle, methodologies utilized in each study, and policy suggestions proposed by each study. Additional emergent trends became apparent when examining these articles as well, particularly comparisons of tornadoes to other hazard types. These articles were then coded as “data” using a general coding schema. The coding schema was initially formed around documenting primary themes of theoretical frameworks, methodologies, and policy suggestions as articulated by each article. Additionally, a somewhat grounded approach was utilized in developing additional themes as they emerged while coding. Put differently, articles were coded in an iterative process with themes developing throughout the process (Strauss 1987). The following section will outline such themes as well as how they were operationalized during the coding process.

*Theory* was one of the primary themes being investigated by this portion of the review. Theory as a theme was coded as the explicit inclusion and articulation of a theoretical framework by the authors. This differs from some previous approaches to

coding theoretical frameworks. For instance, in a similar review examining the state of a body of literature Picou, Wells, and Nyberg (1978) analyzed studies and coded them based on their content within a framework of major sociological paradigms. Many of the articles included in this sample operated within a mercurially defined “disaster framework,” but the theory code was developed in order to document specific theoretical frameworks beyond a broad disaster framework or other paradigms. Articles were coded for theory if they included specific discussion on a theoretical framework, but were not coded for theory if they operated within a more general disaster framework or otherwise did not utilize any theoretical framework.

*Disaster cycle* was coded as a subtheme somewhat related to theory. In addition to looking for specific theoretical frameworks, coding for focus on the disaster cycle was included to capture one major dimension of the previously mentioned “disaster framework” in which many disaster studies operate. This theme was broken into four subthemes representing each phase. These subthemes were based on the classic four-part conceptualization of the disaster cycle put forth by Drabek (1986): preparation, response, recovery, and mitigation.

Not unlike *theory*, disaster cycle was coded based on explicit discussion of any of the phases. Each phase was coded as an independent category, with articles coded for inclusion of each distinct phase or not. Articles which featured discussion and/or analysis on multiple phases were coded as such. Resilience building analyses were coded for mitigation, warnings and other short-term pre-disaster activities were coded as preparation, emergency response and other short-term post-disaster activities were coded as response, and long-term activities coded as recovery. Exclusion of discussion on these

bases or cursory statements without substantive analysis of a phase did not merit an article being coded for a phase.

*Methodology* documentation was another primary motivator of this review. Simply, this theme was coded as methodologies employed by each study in both general terms and more specific data types. At the broad level articles were coded with umbrella terms capturing their methodology/methodologies (e.g., review, interview, survey, and/or content analysis). Broad themes were specified for differentiation, for instance review was also sub-coded as conceptual (i.e., forwarding the disaster framework) or literature (i.e., state of the literature). Further specifications were made when a study employed a case study model examining a single tornado event or community. Types of data were also coded in addition to methodologies (e.g., quantitative/survey, quantitative/secondary data, interview, review, or policy) to better understand contexts in which these methodologies are used.

*Policy suggestions* represent the final primary theme. This, like *theory*, was coded on the basis of explicit suggestions for policy made by authors within the articles. Policy suggestions for the purposes of this review were operationalized as suggestions or guidelines for practitioners (i.e., first responders, emergency managers, city planners, etc.). Policy suggestions were coded for two primary reasons. First, inclusion of policy suggestions was coded in order to identify patterns of fundamental/basic research and applied research. Second, comments about the basic nature of the policy suggestions were also recorded to identify and understand any patterns in the nature of such policy suggestions. Articles that lacked statements or suggestions for improving organized or formal actions regarding disasters were not coded for the policy suggestion theme,



however, notes were made regarding other suggestions, such as proposals for future research, to better differentiate between patterns of basic and applied research.

*Comparative* analysis was an emergent theme that was included in the coding process. It became apparent that several studies included analysis and/or discussion on tornadoes, but tornadoes were not the sole focus. Comparative analysis as a theme was coded as the inclusion of others kinds of disasters or hazards in analyses and/or discussions. Examples would include comparing the impacts of tornadoes to other natural or manmade hazards, or more broad review type analysis that included several hazards. Articles that did not include meaningful discussion on other hazards (i.e., some articles would make mention of other types of hazards in lists, but did not include analysis or further discussion) were excluded from the comparative theme.

#### *Theory and Theoretical Frameworks*

One of the primary objectives of this review was to evaluate inclusion and usage of social theory in disaster research generally, and tornado research specifically. To reiterate, articles were not coded and positioned within predetermined frameworks; articles were evaluated on the basis of their explicit inclusion and statements regarding theory and theoretical frameworks. Of the articles included in this analysis, many either claimed or could be said to be operating within an empirically based but otherwise ill-defined “disaster framework,” but only 38% included discussion of a specific theory or theoretical framework. In addition to the obvious observation of a paucity of theoretical frameworks and use of theory, nuanced patterns emerged within those eight articles that did include theory.

Of the eight articles that did include theory or a theoretical framework, five were used in a framework outlining context. That is to say that rather than testing theories, these articles' methodologies fell within the "review" category, and provided conceptual observations and suggestions regarding research and policy trajectories. For instance, multiple articles aimed to put forth alternative frameworks with which to understand different dimensions of disasters. These frameworks included models of recovery planning (Berke, Kartez, and Wenger 1993), conceptual arguments for the incorporation of human ecology in disaster research (Alexander 1991), and a disaster impact typology model for use by practitioners as part of the International Decade for Natural Disaster Reduction (IDNDR), an international effort in the 1990's to reduce severity of impacts of disasters (Taylor 1990). Others offered reviews of either literature or policy as a way of forwarding various frameworks. Noji (1987) for example reviewed literature and proposed a framework for injury prevention which in their view filled existing gaps in the literature. Similarly, Houston (2015) synthesized literature on media users and uses and proposed a unifying framework for media research, especially for use in preparedness and response phases.

The remaining three articles included in the theory theme engaged in more conventional empirical theory testing. Miller, Adame, and Moore (2003) tested theories of communication, primarily responses to fear appeal warnings, via survey of Oklahoma residents. This article was comparative, and tested the theoretical framework along with earthquake responses also via survey of California residents. Urbatsch (2016) analyzed secondary data (American National Election Studies) to test attitudinal responses to disaster, specifically morality and scapegoating of homosexual populations following a

disaster event. Finally, McKinzie (2016) conducted a content analysis from a critical feminist perspective to illuminate patterns of narratives regarding race in media reports of disasters.

**Table 1. Summary of 30 Years of *Disasters* Tornado-focused Articles**

<i>Article</i>	<i>Theoretical Framework</i>	<i>Methodology</i>	<i>Policy</i>
<i>Suggestions</i>			
Noji et al 1987	Injury prevention framework	Review	Yes
Rattien 1990	N/A	Review	Yes
Taylor 1990	Disaster/impact typology	Review	Yes
Alexander 1991	Human ecology	Review	Yes
Berke et al 1993	Recovery planning	Review	Yes
Schmidlin et al 1995	N/A	Survey/Case study	No
Balluz et al 2000	N/A	Survey/Case study	Yes
Perry et al 2003	N/A	Review	Yes
Peek et al 2003	N/A	Review	Yes
Comstock et al 2005	N/A	Survey	Yes
Donner 2008	N/A	Interview	No
Sagun et al 2009	N/A	Review	Yes
Manuell et al 2011	N/A	Review	Yes
Sengul et al 2012	N/A	Secondary analysis	No
Miller et al 2013	Vested interest/Fear appeals	Survey	Yes
Daniels 2013	N/A	Secondary analysis	Yes
Houston et al 2015	Social media framework	Review	No
Paul et al 2015	N/A	Survey/Case study	Yes

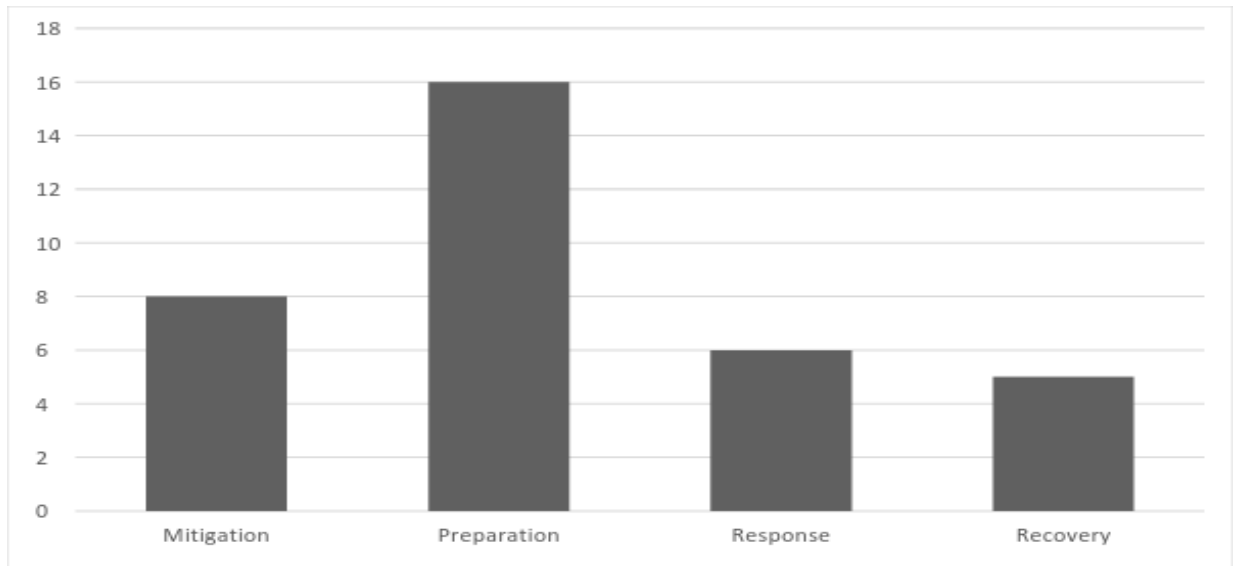
Urbatsch 2016	Set-point theory	Secondary analysis	No
McKinzie 2016	Critical theory; feminism	Content analysis	No
Stokes et al 2016	N/A	Survey	No

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### *Disaster Cycle*

A related subtheme concerned the focus of each article on certain phases in the disaster cycle. Articles were coded in the classic four-part classification of mitigation, preparedness, response, and/or recovery. It is also of note that articles could be coded in multiple categories if their content addressed multiple phases; eleven (52%) addressed multiple phases of the disaster cycle. When tabulated as distinct categories interesting patterns emerge. The most frequently addressed phase was preparedness, with 16 (76%) articles discussing this phase. The majority of these articles were concerned with warning systems and sheltering/evacuation behavior, and how to better allow the former to serve the latter. Preparedness was explored with the most methodological diversity, with reviews, surveys, secondary analyses, and interview approaches being utilized. The second most addressed phase was mitigation, with eight articles (38%). These articles tended to speak to resilience, especially the older articles in the sample (1987-1993), which addressed ways to reduce the severity of disaster impacts. Patterns linking mitigation to preparedness emerged, with all but one article that addressed mitigation also addressing preparedness; the single article that did not address preparedness and mitigation did address mitigation and recovery. These articles heavily favored review methodologies.

**Figure 5. Inclusion of Disaster Cycle Phases in Analyses in *Disasters***



Note:  $N=21$  articles from *Disasters*

The final two phases were explored with slightly less frequency. Six articles (29%) included discussion or analysis on response activities. Four of these articles utilized review methodologies, and discussed response within the context of proposed frameworks. The final two utilized secondary analysis of media discourse and a survey to directly investigate post-impact behaviors. Recovery was the least discussed phase, with five articles (24%). Again, three of these articles discussed recovery within the context proposing a new or expanded framework. The remaining two utilized secondary quantitative data and media narratives, and were concerned with attitudinal changes and experiential differences between demographic groups respectively across time after tornadoes.

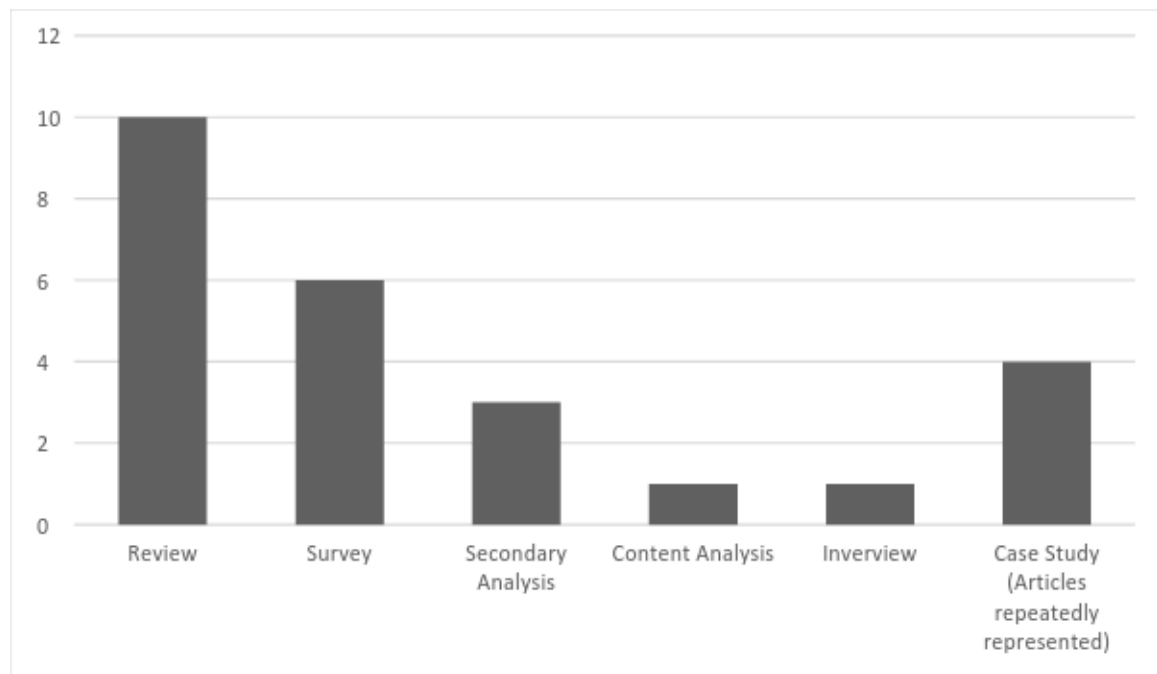
### *Methodologies and Data Types*

A second major goal of this review was to identify and document patterns of utilization of various methodologies. General terms were used to qualitatively identify general methodologies, and data types were tabbed to understand these patterns further; studies that employed mixed methodologies were coded inclusively (i.e., categories were not exclusive). Ten of the sampled articles (48%) could be generally classified as review articles. Many of those articles utilized a review approach to outline conceptual space for expansion of existing frameworks or new frameworks (Noji 1987; Taylor 1990; Alexander 1991; Berke, Kartez, and Wenger 1993; Perry and Lindell 2003; Peek and Sutton 2003; Houston 2015). Generally speaking, the remainder of the review articles spoke to evaluation and/or development of policy or practical procedures (Rattien 1990; Sagun, Bouchlaghem, and Anumba 2009; Manuell and Cukor 2011). Data used in these articles were typically either literature (70% of subsample; 33% overall) or policy (27% of subsample; 14% overall).

The remaining eleven sampled articles employed more empirical methodologies. Six (55% of subsample; 29% overall) employed surveys (Schmidlin and King 1995; Balluz, Schieve, Holmes, Kiezak, and Malilay 2000; Comstock and Mallonee 2005; Miller, Adame, and Moore 2013; Paul 2015; Stokes and Senkbeil 2016). Unsurprisingly, all of these articles employed quantitative survey data types. More noteworthy is that these articles employed quantitative survey data exclusively, indicating an absence of mixed methodologies including surveys. Three (27% of subtheme; 14% overall) other articles were coded as using other quantitative methodologies (i.e., secondary analysis), meaning that quantitative data were utilized without surveying (Sengul, Santella,

Steinberg, and Cruz 2012; Daniels 2012; Urbatsch 2016). The two remaining articles are lone examples of qualitative interviewing (Donner 2008) and qualitative content analysis (McKinzie 2016). Of all articles sampled, only four (19%) could be considered case study designs (represented as the last column of Figure 1, which represents those four articles as case studies in addition to their methodological approach) in that they focused on either a single community or disaster event.

**Figure 6. Use of Different Methodologies in Tornado Research in *Disasters***



Note:  $N=21$  articles from *Disasters*

### *Policy Suggestions*

The third objective of this review was to identify the presence and pattern of policy suggestions. Coding policy suggestions was done similarly to coding theoretical perspectives; articles were coded based on their “face value” explicit statements

regarding policy rather than placed in any pre-determined schema. Roughly 67% (14) of the articles in this sample offered policy suggestions. Content of these policy suggestions ranged from increasing the effectiveness of preparedness activities (e.g., warnings) to guidelines for recovery programs. For instance, eight articles articulated suggestions pertinent to preparedness activities, such as more effective use of media and more clear language for warnings, educational and shelter improvements for responders and citizens. Others offered suggestions for recovery and other post-disaster planning, guidelines for management of terrorist attacks, or made suggestions which would generally apply to all phases of the disaster cycle (e.g., inclusive frameworks, reorienting frameworks, or pedagogical and research suggestions). Most of the articles that did not offer policy suggestions did make suggestions for future research. These suggestions typically encouraged the use of frameworks being suggested or the continuation of lines of research put forth in the articles.

### *Comparative*

One of the first themes that emerged during the review process addressed whether the article focused on tornadoes exclusively or as part of a broader analysis. To reiterate, all articles included in the sample contained some form of analysis or discussion on tornadoes as it was a critical component of the sampling criteria. Seven of the articles (33%) were coded as “focused,” or analyzing tornadoes exclusively. Methodologies for these seven included five surveys, one content analysis, and one utilization of interviewing (these include the four case study designs). Articles coded as focused were comprised entirely of empirical studies. The remaining 14 articles (67%) were coded as “comparative,” or including analysis of tornadoes alongside analyses of other hazards



(i.e., other natural hazards, such as earthquakes or hurricanes, or technological hazards, such as terrorism, or NaTech hazards, such as industrial accidents initiated by natural hazards). These articles tended to be more review oriented, either literature, policy, or conceptual, with the exception of three secondary analyses and one comparative survey.

In addition to comparisons to other hazards generally, comparisons specifically to terrorism were identified. Unsurprisingly, comparisons to terrorism were made exclusively after the terrorist attacks of September 11, 2001, and the subsequent restructuring of the Federal Emergency Management Agency (FEMA) into the Department of Homeland Security (DHS) in 2003. Five articles (24%) from the full sample included comparisons to terrorism. 35% of the 14 articles published after 2001 made such comparisons. While there seems to be an understandable trend of increased attention to terrorism after 2001, all articles which made comparisons to terrorism were review articles, indicating a lack of empirical comparative studies.

Research on tornadoes beyond the scope of the *Disasters* journal reviewed thus far has covered similar topics and themes as those identified above, such as preparedness and evacuation behaviors, as well as local government emergency response (Wolensky and Wolensky 1990; Paul, Brock, Csiki, and Emerson 2003; Paul, Che, Stimers, and Dutt 2007; Abramson and Culp 2013). Research has also focused on infrastructure and community recovery, with attention given to recovery of the built environment and its effects on community bonding (Moore 1958; Stallings and Schepart 1987; Mitchem 2003; Paul, Che, Stimers, and Dutt 2007; Smith and Sutter 2013). Other research has focused on stress mitigation and psychological recovery, often highlighting individual coping strategies and the role of the family or other social support networks (Moore

1958; Erickson, Drabek, Key, and Crowe 1976; Stewart 1986; Smith and North 1993).

Attention has also been given to the identification of vulnerable populations (e.g., minorities, children, and the elderly) and the development of strategies for mitigating the damaging effects of tornadoes for those groups (Bolin 1986; Bolin and Klenow 1988; Pekovic, Seff, and Rothman 2007; Lack and Sullivan 2008).

With few exceptions (e.g., Zurcher 1968), theoretical advancements in community social psychology have been limited in disaster research in general and tornado disaster research in particular. Research has examined individual psychology, coping mechanisms, and the role of the family in mitigating individual trauma, but connections between individual behaviors and the wider social environment have not been explicitly made in this context.

When considered in total, research into tornadoes is at least somewhat reflective of disaster research in general. There is heavy emphasis on practice and policy development, but a lack of theoretical development and implementation. As has been alluded in previous sections of this chapter, structural ritualization theory offers tremendous potential in contributing to sociological understanding of human interactions with tornado hazards, as well as disasters more generally. The following sections of this chapter will focus on core concepts of SRT, including the development of ritual as a social psychological concept.

### **Intellectual History of Ritual as a Social Psychological Concept**

Early sociological conceptualizations of ritual may be found primarily in Durkheim's *The Elementary Forms of the Religious Life* (1912/1995). While rituals were not laid out systematically per se, this work established other concepts which inform ritual analysis as

important for individuals and groups, as well as performances with symbolic meaning.

Durkheim discussed religion as an organizing institution for societies. Key to Durkheim's analysis was the distinction of certain objects (physical or social) as either sacred or profane. Sacred objects are those imbued with symbolic meaning and may take any form, while profane objects lack similar symbolic meaning (i.e., objects which are standard or unexceptional). Rituals in this framework, referred to as rites, are activities which establish and maintain connections with sacred objects. Further, rites were activities focused on and structured around the sacredness of certain objects. Rites were dependent on the sacred object and were not performed or meaningful beyond the context of the sacred object, as the object defined and dictated appropriate behaviors which constituted rites (1912/1995).

The relationship between rites and sacred objects was exemplified in Durkheim's analysis of totemic religions. Rituals in these groups often focused on the importance of a totem's symbolism as it related to a group's identity; that is, the chosen totem came to reflect a group's perceived exceptional characteristics. Totemic rituals in these groups were often engaged in collectively, and in this way a group's identity could be established and/or distinguished from others based on the valuation of the totem and rituals structured around it. Further, collective performance of rituals resulted in collective effervescence, a feeling of shared emotional intensity resulting in heightened social solidarity (1912/1995).

A second major conceptualization of ritual may be found in the writings of Goffman, specifically *Interaction Ritual: Essays on Face-to-Face Behavior* (1967), *The Presentation of Self in Everyday Life* (1959), and, to a lesser extent, *Asylums* (1961).

While inspired by Durkheim's work, Goffman differed in focus and expanded on Durkheim's conceptualization of ritual in a number of ways. These differences are revealed in Goffman's definition of ritual: "I use the term 'ritual' because this activity, however informal and secular, represents a way in which the individual must guard and design the symbolic implications of his acts while in the immediate presence of an object that has a special value for him" (1967; 57).

Elements from this definition are clearly drawn from Durkheim, specifically symbolic significance tied to valuable (sacred) social objects which invoke ritual performance. Key differences arise in Goffman's focus towards the kinds of social objects tied to ritual performances into informal and/or secular territory beyond the scope of sacred religious settings. For instance, one's sense of self, interpersonal interactions, or social situations more generally may be classified as objects tied to ritual performances. In other words, Goffman focused on rituals based on "profane" objects in the modern world, which include our sense of self or social identity, rather than totems or religiously significant objects that Durkheim focused on.

Examining a number of Goffman's works holistically reveals the mechanisms through which this conceptualization of rituals function. Building on previous work, Goffman refers to status rituals, interpersonal rituals, and deference rituals, all of which revisit contributions from *The Presentation of Self in Everyday Life* (1959) through the lens of ritual dynamics. In this way rituals and their performance are bound in many ways to social interactions, and are key in presenting the proper identity in a given situation (e.g., greeting rituals, such as exchanging "hello," are important in maintaining proper face, and may cause embarrassment for either party if not performed properly).

Equitable performance of interpersonal rituals yields social solidarity, while inequitable or improper performance of these rituals can have the opposite effect on a group, and perhaps more dire consequences for an individual (i.e., ostracism and/or negative labelling).

Rituals in this framework are actions which are context specific in their interpretation and performance that are important in communicating a person's identity and managing impressions; performances are aimed toward presenting the proper "face" given the definition of a situation. Performing ritual gestures in socially acceptable ways provides a means for individuals to present and/or reinforce one's identity and promote solidarity.

Interaction ritual theory, put forth by Collins (2004), builds upon Durkheimian and Goffmanian conceptualizations of ritual, but with key variations. While Goffman emphasized context specific performances and interpretations of behaviors and Durkheim discussed activities based on maintaining ties to sacred objects, Collins places importance on situations, rather than actors or specific activities per se. The result is a conceptualization of ritual, and an analytic focus more generally rooted in situations rather than acts. Ritualized situations exhibit key characteristics which yield heightened solidarity and emotional energy for participants. These characteristics include physical copresence, a separation demarking insiders and outsiders, a shared focus of attention for participants, and a shared mood. Rituals are successful to the extent that members of a group perceive and engage in activities exhibiting these four characteristics.

In addition to a reframing of ritual as a sociological concept, Collins proposed an analytic framework for social psychology rooted in situation and context rather than

individuals and/or actions. However, this is not to say actions are not significant, rather they are rooted in situations which ultimately inspire their performance. Collins refers to this as interaction ritual chains (2004). Examples included in Collins' early analysis of interaction ritual chains include intimate sexual encounters and social tobacco use. The framework has also been used to explain solidarity building in communities following the 9/11 terrorist attacks (Collins 2004b), as well as the performance of sports fandom identities in a number of contexts beyond those typically expected, such as fandom present at weddings, and not just stadiums (Cottingham 2012).

While building on concepts put forth by Durkheim and Goffman (more the latter than the former), the utility of interaction ritual theory lies in its analytical focus on situations rather than idiosyncratic actions (again, a Goffmanian sentiment). There are oddities in Collins' original propositions of IRT (2004), however. For instance, Collins purports interaction ritual theory to be post-structural in nature; it could be argued that empirical demonstrations argue the contrary in that micro-structures elicit certain behaviors or interaction rituals. Further, interaction ritual theory originally failed to account for interaction rituals entering into individual actors' identities and permeating social spheres beyond the situation from which they originate; processes which were later demonstrated by Cottingham, for example (2012).

These perspectives and uses of ritual as a concept have been outlined in order to contextualize the theoretical framework used in this analysis. Structural ritualization theory builds upon many aspects of perspectives highlighted above, while offering a number of rigorous conceptual frameworks with which to systematically study ritual dynamics in numerous contexts. Structural ritualization theory was chosen largely due to

its robustness and utility, the following sections will feature more detailed discussion about the theory in general, as well as conceptual frameworks proposed within the theory.

### **Structural Ritualization Theory**

The previous section highlighted intellectual foundations and developments regarding ritual as a social psychological concept. These perspectives were briefly summarized in order to differentiate in appreciable ways the framework being used for this study.

Structural ritualization theory contends that rituals play a central role in providing meaning, value, and order for social units (Knottnerus 1997; 2011). Rituals also provide predictability, structure, a sense of purpose, direction, and feelings of solidarity, which are experienced by individuals, groups, communities, and societies. Put differently, rituals are significant at micro and macro levels, and provide an avenue for understanding linkages between levels of analysis. This theory contributes one of the few explicit conceptualizations of rituals which may be applied to ritualized behaviors of any sort; rituals are identified as ritualized symbolic practices (RSPs). RSPs are formally defined as schema driven action repertoires with symbolic and emotional meaning. Schemas are cognitive maps, and action repertoires are socially standardized and/or acceptable behavioral sets. To put these concepts in different terms, when individuals engage in RSPs they are actively navigating various social situations (i.e., using their cognitive maps) and engaging in appropriate behaviors according to the situation presented. RSPs are engaged in constantly by individuals and groups (i.e., collectively performed), either implicitly or explicitly; as familiarity with certain social situations increase, the utilization of cognitive maps and enacting of RSPs can occur instantaneously with minimal effort by the individual. In this way, RSPs enter into and ultimately contribute to

the formation of day-to-day taken for granted activities.

Ritualized symbolic practices (RSPs) differ from habits and/or routines in that they are actively engaged in (to varying degrees) and possess symbolic meaning. Habits, on the other hand, may be thought of as reflexive or engaged in with very little thought or concentration from the person performing them. Habits also lack the symbolic and emotional meaning inherent in ritualized practices (Knottnerus 2002).

Ritualized symbolic practices take numerous forms and may impact or be valued by individuals in different ways. The relative strength, or importance, of RSPs may be evaluated by examining four key components common to all RSPs: salience, repetitiveness, homologousness, and resources. Salience refers to the degree to which an RSP is perceived to be central to an act, action sequence, or set of interrelated acts. Repetitiveness is the relative frequency in which an RSP is carried out, which can range from highly frequent throughout the course of a day or relatively infrequent. Homologousness refers to the degree of perceived similarities among different RSPs. Homologous RSPs exhibit high correspondence in meaning and form, and have similar effects or outcomes for individuals performing them within a certain social context. Finally, resources are all materials which are required for an RSP to occur. Resources may be both human (e.g., knowledge, capacities) and/or non-human (e.g., capital, space, and/or time). These four factors considered together are used to determine the strength, or rank, of an RSP. RSPs that are highly ranked will have greater influence, effect, or importance in those social situations in which they are present as well as for those who are engaging in them (Knottnerus 1997; 2011).

Rituals also vary in their application. For instance, while some RSPs may be



taken for granted or emergent parts of daily life, other RSPs may be carried out in a more deliberate calculated manner. These deliberate processes are referred to as strategic ritualization within an SRT framework. Strategic ritualization occurs when “actors utilize or manipulate a system of ritualized practices in order to realize certain outcomes (Knottnerus 1997, p. 275).” These actors are classified in three ways depending on the nature of RSP utilization: ritual legitimators, ritual entrepreneurs, and/or ritual sponsors (Knottnerus 1997; 2011). Ritual legitimators are those who validate particular RSPs as associated with certain groups; these actors are often attributed some esteem or status within the group they are legitimating practices for. Ritual entrepreneurs are actors who utilize RSPs as a means to carry out economic activities, such as an ethnic restaurant or a themed festival. Ritual sponsors are actors who promote events or activities which are comprised of RSPs associated with a particular group. Legitimators and sponsors differ in that legitimators influence which RSPs are associated with groups, while ritual sponsors facilitate events which utilize a group’s RSPs. Ritual sponsors are often members of the group they are promoting events for, but are not required to be. The strategic ritualization framework was expanded to include a fourth category of ritual enforcers (Knottnerus, Van Delinder, and Edwards 2011). Ritual enforcers are actors who determine which RSPs are associated and performed by particular groups by use of a position of power or domination.

Strategic ritualization has been explored in a number of contexts. Knottnerus and LoConto (2004) examined strategic use of RSPs in establishing, maintaining, and promoting Italian ethnic identities in Oklahoma. Knottnerus, Van Delinder, and Edwards (2011) similarly analyzed uses of RSPs by groups such as the Orange Order, American

Indians, and the Nazi party in Germany in forwarding goals and/or maintaining group identities. Delano and Knottnerus (2014) identified a strategic process of deritualization and reritualization employed by the Khmer Rouge in order to maintain authoritarian control over Cambodian people.

Ritualized symbolic practices are performed both by individuals as well as collectively in groups. There are lines of theory within SRT which explore the ways in which collective RSPs are performed and affect individuals and groups. One model outlines collective RSPs as collective emotional events, which can evoke an individual's emotional state and commitment to a group. These special RSPs may be analyzed by degrees to which they feature a shared focus of attention, interactional pace, interdependence of actors, and resources (Knottnerus 2010; 2014). Shared focus of attention refers to the degree to which members of a group are focused on certain objects, which could consist of individuals, symbolic objects, or the group itself. Interactional place refers to the degree to which members of a group are collectively performing behavioral components of RSPs, evaluated by rate of interaction (e.g., pace) and/or the presence of rhythmic motion. Interdependence of actors refers to distributions of different RSPs at a collective event and the interconnectedness of those RSPs. Resources refer to human and nonhuman resources which enable performance of RSPs. Each of these factors may be used to evaluate the nature of collectively engaged in RSPs with additional nuance in order to understand dynamics such as the nature of collective RSPs, degrees of emotional intensity, or collective pride.

In addition to emotional components, individually or collectively performed RSPs can have implications for a person's identity. Transformative rituals are RSPs which

denote membership into a group or signify a change in an individual's identity (Knottnerus 2015). Transformative rituals are key in defining a person's group membership, as well as demonstrating qualities which denote or identify people as members of certain groups, both outwardly (i.e., others' identification of a person) and inwardly (i.e., one's own identification).

Transformative rituals alter a person's identity to varying degrees, otherwise referred to as the degree of transformation, which is dependent on a number of factors. First, the rank of transformative RSPs and associated symbolic meaning is key in determining the degree of transformation; more highly ranked RSPs will result in a greater degree of transformation. The nature and intensity of shared collective emotions (Knottnerus 2010) associated with transformative RSPs also determines the degree of transformation; again, more intensely felt and shared collective emotions will result in a greater degree of transformation. Third, the collective pride (i.e., a high degree of positive feelings felt towards a certain group rooted in a belief in the superior or desirability of qualities of said group; Knottnerus 2014) associated with transformative RSPs is also of importance, with high collective pride yielding greater degrees of transformation. Finally, degree of transformation is dependent on the extent to which an RSP is successfully performed, either individually or collectively. If an individual demonstrates their capacity to successfully perform RSPs deemed important to a group, their degree of transformation would be greater (Knottnerus 2015).

### **Disruptions, Deritualization, and Reritualization**

Structural ritualization theory explicitly outlines what normal ritualized patterns of interaction “look” like and the mechanisms by which they take place, the previous section

highlighted a number of ways SRT may be used to understand those patterns. But what happens when RSPs are disrupted? SRT directly examines effects related to the disruption of RSPs—events or conditions that disturb RSPs engaged in by individuals and groups of various sizes. Deritualization occurs when RSPs are disrupted to the point of being discontinued. This can be problematic for individuals, groups, and communities because RSPs provide meaning, value, and structure in everyday life. Thus, if RSPs are disrupted and deritualization occurs, the meaning, value, and direction provided by those rituals are diminished or lost. However, individuals can actively navigate various social milieus, and may engage in activities in response to disruptive conditions; this process is known as reritualization. Reritualization occurs when individuals, groups, and/or communities reconstitute disrupted RSPs or form new RSPs to replace old ones. As reritualization occurs and RSPs are reconstituted, structure, order, and meaning derived from rituals are also restored, or in instances of new RSP generation an alternative structure or order may be constructed (Knottnerus 2002; 2011).

Initial SRT research has focused explicitly on disruption, deritualization, their consequences, and the ways people cope with these experiences through reritualization by examining groups in diverse social settings and/or situational contexts. For example, a study of disruption, deritualization, and reritualization coping strategies for those in internment camps during World War II identified a number of RSPs which were performed in order to adjust to life in the camps. Nazi concentration camps, Japanese-American internment camps, Japanese prison camps, and Russian prison camps were examined; at least some (but not necessarily all) individuals in every setting engaged in reritualization (Van de Poel-Knottnerus and Knottnerus 2011). This study provided

evidence that reritualization (and more generally RSPs) is a process that occurs cross-culturally. Also, rituals of different types at several levels were reconstituted. For example, individuals engaged in personal RSPs such as hygiene or personal prayer, groups would informally organize various activities like games or formally organize educational lectures or religious services. That individuals engaged in reritualization in such extreme circumstances speaks to the power of RSPs, particularly in the case of concentration camps where, for example, practicing Jewish religious activities could literally have meant death. Indeed, some survivors directly attributed the reconstitution of RSPs as key to their survival, further speaking to the necessity of RSPs in individuals' lives (Knottnerus 2002).

Another study examined the persistence of certain RSPs in ancient China despite low resource availability due to ecological strain (Sarabia and Knottnerus 2009). Additionally, a series of laboratory experiments examined the reproduction of social structure through RSPs in task groups (Sell et al. 2000), as well as the hindering effects of disruption and deritualization for task groups (Sell, Knottnerus, and Adcock-Azbill 2013). Ritual dynamics have also been examined as a catalyst for mass homicide, particularly when disruptions to certain RSPs, failure to perform RSPs, and/or RSPs which induce stress become routinized (Ulsperger, Knottnerus, and Ulsperger 2017). Finally, patterns of deritualization and reritualization are being investigated in polar expedition crews in the 19th and 20th centuries (Knottnerus In progress).

A preliminary application of SRT to disasters examined the role of ritual response and recovery. Thornburg, Knottnerus, and Webb (2007; 2008) conducted qualitative content analyses of early sociological studies of disaster. Findings from these studies

were re-analyzed through the lens of SRT, and it was observed that some behaviors which seemed nonsensical to the original researchers were actually attempts at reritualization. Bhandari, Okada, and Knottnerus (2011) examined the role of ritual in preparing for and recovering from disaster in Nepalese communities. They identified several patterns of ritualized behaviors (e.g., festivals) which contributed to the collective cultural memory of communities previously affected by disasters, as well as the positive effects of these ceremonies in enabling communities to address the damage and mitigate psychosocial trauma brought on by disasters (i.e., earthquakes).

### **Disasters and Structural Ritualization Theory**

With key elements of both SRT and disaster literature covered thus far, this section will focus on ways SRT's framework can contribute to disaster theory and research. An SRT framework is not necessarily intended to replace traditional conceptualizations of disaster in a conflictual manner, but rather to offer an alternative and/or complementary perspective with which to explore new lines of inquiry.

First, SRT offers an altogether different way to conceptualize disaster cycles. Rather than the traditional four-part cycle highlighted earlier in this chapter (i.e., preparation, response, recovery, and mitigation), disasters from an SRT framework can be framed as cycles of disruption, deritualization, and reritualization. Disruption is primarily brought on by the onset of a hazard event, and the degree to which a disaster has disrupted social processes can be evaluated by degrees of deritualization experienced by individuals and/or groups. Recovery in this framework would entail reritualization, and the degree to which a community or segments of a community are able to engage in

reritualization. Ritual dynamics could also be used to capture certain behavioral aspects of mitigation, for instance by examining uses of strategic ritualization to enhance resilience through educational programs.

A framework built on disruption, deritualization, and reritualization can serve as a standalone framework, but can also contribute to issues currently faced by more traditional conceptualizations of disaster cycles, particularly ambiguity regarding transitions from one phase to another. Examining ritual dynamics as operationalized by SRT offers specific markers and ways to evaluate them. Put differently, disruption and deritualization can be specifically identified by losses of certain rituals and the associated value, structure, and meaning they provide. Likewise, reritualization can also be identified by specific behaviors individuals or groups engage in to reconstitute old rituals or create new ones. Further, the relative importance of types of rituals individuals and groups engage in during reritualization can be evaluated by determining the strength of RSPs (i.e., salience, repetitiveness, homologousness, and resources) which could aid in understanding behaviors that signify transition from one phase to another, either within an SRT framework (i.e., deritualization into reritualization) or traditional frameworks (i.e., response into recovery).

Additionally, framing disasters as disruption, deritualization, and reritualization can allow for study of these processes in dynamic ways within a community. For instance, different segments of a community will experience differential degrees of deritualization, while others may engage in reritualization that is not broadly experienced. A person may also engage in reritualization in some aspects of their life, but maintain a state of deritualization in others, for instance if their place of business resumed operation

along with occupational rituals, but their home was left in disrepair along with rituals that occur there. This pattern may be observed at individual or group levels and could contribute to understanding dynamics of inequality during disaster; some individuals or groups may or may not experience deritualization and/or reritualization in similar ways. In addition to nuanced specificity within a community, an SRT framework allows for analysis at multiple levels, and allows for simultaneous examination of multiple levels of ritual dynamics at individual, group, and/or community levels, as well as the intersections of those levels (i.e., as individuals form groups, groups form communities, etc.).

An SRT framework may also reveal insight regarding specific behaviors that constitute what is traditionally referred to as response and recovery, as well as social mechanisms underlying development of therapeutic communities. One example of these mechanisms could be ways in which reritualization occurs in emergent informal contexts when compared to more formalized or strategically utilized RSPs. This change in ritual dynamics could result as a function of time, as more resources for more elaborate RSPs become available, and identifying types of RSPs and general patterns of reritualization along these lines could have significant implications for understanding community recovery.

Similarly, there could be significant value in understanding the ways reritualization is carried out by individuals performing personal RSPs as well as RSPs which are performed in collective settings. As noted in previous sections, reritualization entails the restoration of value, structure, and meaning in day-to-day practices. Additionally, collectively performed rituals can have considerable emotional component. This means that reritualization, and specific RSPs that constitute reritualization, can have



implications for individuals who are individually or collectively engaging in various rituals regarding subclinical and/or clinical levels of stress and trauma. Finally, collectively performed rituals, in addition to emotional components, can contribute to inclusion of disaster experiences into individual and collective senses of identity (i.e., transformative rituals).

## **Conclusion**

To reiterate, SRT emphasizes the importance of ritual in providing meaning, order, and structure to everyday life. RSPs are schema driven action repertoires - or behaviors with symbolic and emotional importance. Disasters may be conceptualized through an SRT framework as patterns of disruption, deritualization, and reritualization. These concepts, along with others from SRT, form the core of the theoretical framework used for this analysis.

This analysis will first endeavor to explore patterns of disruption, deritualization, and reritualization. Specific RSPs affected by deritualization or employed during reritualization were identified and evaluated on the basis of their strength (i.e., repetitiveness, salience, homologousness, and resources), their individualistic or collectively performed qualities, and varying degrees to which they were informally performed or strategically utilized. Finally, emotional and transformative qualities of RSPs will also be evaluated as they were engaged in throughout disruption, deritualization, and reritualization processes. Concepts from this theoretical framework when applied to disasters were used to formulate the following research questions:

1. What are the fundamental patterns of disruption and deritualization for individuals, groups, and communities associated with a disaster?
2. How do individuals and communities engage in reritualization following a disaster?
3. What temporal patterns of disruption, deritualization, and reritualization emerge following a disaster?
4. What evaluations may be made regarding the rank of RSPs throughout processes of disruption, deritualization, and reritualization?
5. What is the relationship between reritualization and psychosocial trauma or other emotional states of individuals and/or groups?
6. In what ways are RSPs strategically utilized during disaster conditions?
7. To what degree are rituals transformative of identities for those performing them during reritualization processes?
8. How do rituals contribute to the development of therapeutic communities?

These research questions will guide this analysis going forward. The following chapter will outline the methodological approach for this work. This will include discussion on data sampling, analytic strategies, and general commentary on the approach utilized for this dissertation.

## CHAPTER III

### METHODOLOGY

Previous chapters have outlined the context and theoretical framework for this work. Research questions were identified in chapter two which will guide the remainder of this dissertation. This chapter will outline the methodological approach used to address those research questions. This dissertation will utilize qualitative content analysis of media articles covering the Joplin and Moore communities following each disaster. This chapter will first provide commentary on qualitative research in general, as well explanation of qualitative content analysis strategies. Data sampling and selection strategies will then be outlined, followed by a brief review of news media in disaster related literature. The analytic strategy employed with this work will then be described in greater detail.

#### **Qualitative Content Analysis**

Qualitative research as a broad approach may be described as “a distinct field of inquiry that encompasses both micro- and macroanalyses drawing on historical, comparative, structural, observational, and interactional ways of knowing” (Hesse-Biber and Leavy 2004:1). Qualitative research is practiced by utilizing a number of semi-structured

or structured techniques, such as participant observation, focus groups, interviewing, or secondary analyses of texts. The common thread that positions these methods as qualitative is the production, utilization, and/or analysis of non-numerical data. This research paradigm predates sociology as a discipline, as hermeneutics for example (see Deising 1991 for an excellent review on hermeneutics' influence on qualitative sociology), and generally emphasizes the importance of deep understanding of particular social phenomena. When compared to quantitative research, qualitative approaches tend to rely on some sort of interpretation of data, are naturalistic in that researcher manipulation of subjects is typically minimal, and case-oriented rather than variable-oriented in that emphasis is placed on understanding cases in as much depth as possible (Shreier 2012).

Qualitative content analysis is one methodological approach within the broader qualitative paradigm. Content analysis generally speaking refers to the systematic analysis of text-based data; text refers to various forms of media, which may include written word, video, and/or images. Qualitative content analysis was originally differentiated from quantitative content analysis, which emphasizes conversion of text to numerical data in various ways, by Kracauer's (1952) observations of the limits of exclusively quantitative content analyses. Specifically, Kracauer noted that meaning is complex and context specific, is not always immediately apparent and may require deeper inspection, and that the relative importance of meaning in text is not necessarily linked to quantitative frequency.

In practice, perhaps the primary feature of qualitative content analysis entails the systematic nature of the approach. Using this technique involves approaching data in a

consistent manner across an entire analytic period. It is useful in that qualitative content analysis offers flexibility in how data might be systematically approached; put differently, there is no single “correct” coding strategy. Finally, qualitative content analysis is beneficial in that it may be used to reduce a large body of data into more easily usable forms. Again, this is accomplished by systematically approaching data with a consistent coding schema tailored to data being analyzed (Shreier 2012).

Qualitative content analysis is the general approach taken by this dissertation. In the interest of systematically approaching data, core SRT concepts were operationalized with a three-part coding schema. This schema was utilized to categorize statements within media narratives as 1) descriptions of disruption and/or deritualization, 2) descriptions of reritualization, and 3) self-reflective statements regarding disruption, deritualization, reritualization, and/or RSPs and their significance. This schema was developed in part from other studies employing SRT and text-based narrative data (Van de Poel-Knottnerus and Knottnerus 2011; Knottnerus In progress; Delano and Knottnerus 2018); the specific ways data were coded utilizing this schema will be expanded upon later in this chapter as well as in the following chapter of this work. The remainder of this chapter will provide descriptions of data sources, before returning to further discussion on analytic strategies employed to address the research questions stated in the previous chapter.

### **Data Selection**

The Joplin and Moore tornadoes were typical of many natural disasters, and the exceptional amount of media coverage makes them suitable candidates for qualitative content analysis. Media text constitutes a significant source of data, and is appropriate

for a number of analytic strategies. Cotter (2001) described news, when treated as an object of study, as consisting of two key components: the story and processes involved in producing the text or story. This analysis is primarily concerned with the first of these components in order to understand narratives that emerged after each disaster. Narrative in this context has been defined by Labov (1972: 359-360) as “one method of recapitulating past experience by matching a verbal sequence of clauses to the sequence of events which (it is inferred) actually occurred.” Put differently, narratives reflect a sequence of events and can reveal numerous aspects of social life in a given context. While news reporters act primarily as storytellers, sometimes distorting chronology for dramatic effect in a news story, newspapers (and other news media) do act as a record for society (Cotter 2001).

Media has been utilized as data in analyses of disasters with some frequency. Molotch and Lester (1974) highlighted media’s role in constructing reality through news, and that news is often more the product of promoters of certain messages packaging those messages to consumers, particularly in the context of accidents and scandals. Gamson, Croteau, Hoynes, and Sasson (1992) echoed similar sentiments in noting that media actors do not necessarily reflect reality, particularly in the context of media conglomeration with fewer more polarized narrative perspectives. Gamson and Stuart (1992) demonstrated this point by analyzing competing narratives as they were constructed in Cold War era political cartoons. Anderson (1997), on the other hand, noted the role of the media in reporting disaster events as one of a relatively objective observer tasked with providing key information to those affected directly by a disaster as well as society in a more general sense. Putnam (2000) echoed a similar sentiment by

highlighting the capacity of media members to foster solidarity by reporting essential information, which can be of particular importance in times of disaster.

Studies utilizing news media as data have explored issues related to numerous disasters and the role of media in framing and highlighting emergent narratives in a broad range of contexts including oil spills (Gill and Ritchie 2005), hurricanes (Gawronski, Olson, and Carvalho 2006), acts of war (Vincent 2000), global warming (Metag 2016), and issues of hazard and risk (Lule 2006; Miles and Morse 2006). Further, contemporary coverage of disasters by news outlets tends to seek out and publicize multiple stakeholder perspectives, such as community members, emergency managers, or other authorities. However, many of these accounts tend to emphasize sources of authority and/or power, especially in instances of technological disaster (Sood, Stockdale, and Rogers 1987; Smith 1993). Beyond disasters but still relevant here, media data has been used to construct descriptive narratives of significant events (Lee and Ermann 1999), as well as narratives of ritual dynamics within organizations (Knottnerus, Ulsperger, Cummins, and Osteen 2006).

The Joplin and Moore tornado disasters were culturally significant, which was manifested in extensive media coverage from multiple perspectives within each community and surrounding communities. Given that these events were natural disasters, problems regarding disputes in claims-making and narratives favoring powerful actors are not anticipated as these issues are more frequently encountered in instances of technological disaster. While news media following natural disasters can misreport specific details and propagate “disaster myths” (Wenger and Friedman 1986), it was expected that media data in these instances were well suited for analyzing ritual dynamics

in these communities due to heightened focus regarding human interest stories surrounding these events. Further, this strategy is utilized to mitigate potential respondent fatigue, which refers to reluctance to participate in studies due to a number of factors which include burnout from over-study (Clark 2008). As both events were highly culturally significant, survivors were focal points for many journalistic and scientific inquiries, these data and sources allow for study of each event without further drawing upon each communities' mental and/or emotional resources.

Multiple sources were pursued to gain local, regional, and/or state perspectives for each disaster, and in an attempt to gather more well-rounded coverage of each event (Earl, Martin, McCarthy, and Soule 2004). Two outlets were utilized for the Joplin tornado: the Joplin Globe ([joplinglobe.com](http://joplinglobe.com)) and the Kansas City Star ([kansascity.com](http://kansascity.com)). Three outlets were sampled from for the Moore tornado: the Moore American ([mooreamerican.com](http://mooreamerican.com)), the Norman Transcript ([normantranscript.com](http://normantranscript.com)), and the Daily Oklahoman ([oklahoman.com](http://oklahoman.com)). Search engines on each website were employed first, with searches supplemented using Lexis-Nexis database with search options limited to these specific newspapers in order to gain full access to as many articles as possible.

Broad search queries of "Joplin/Moore" and "tornado" were used in Boolean search functions in order to gain access to a broad range of articles covering each event. Searches were limited to three months after each tornado (i.e., May 22-August 22, and May 20-August 20). This period is within Drabek's (1986) window of recovery, which was defined as six months or less, and captures much of the heightened focus of media outlets before coverage dropped in lieu of more recent events. This sampling window captured the highest points of news cycles focusing on each event, with articles being



published less frequently near the end of each window. Additionally, this strategy was adequate in reaching saturation for exploring post-disaster behaviors ranging from immediately to weeks and months after each tornado.

This sampling strategy and timeframe yielded 1,793 total articles covering both events. The totals for publications are as follows: Joplin Globe 1,196; the Kansas City Star, 50; the Daily Oklahoman, 103; the Moore American, 140; the Norman Transcript, 304. When combined by event, this yields 1,246 articles covering the Joplin tornado, and 547 articles covering the Moore tornado.

### **Analytic Strategy**

As noted at the beginning of this chapter, sociologists have considered a multitude of ways to analyze narrative text, many of which focus on various aspects of the production of narrative (Labov 1972; Bell 1991; Cotter 2001). For instance, one approach to studying linguistic and symbolic constructions of language within a narrative might involve line-by-line analysis of language use in order to construct narrative (Franzosi 1998). While this study utilizes narrative text, techniques focused on discerning production of text will not be emphasized. Rather, narrative texts were used as a unit of record in order to construct a broader experiential narrative for each community and their members throughout processes of disruption, deritualization, and reritualization during each disaster. Put differently, texts were interpreted with a qualitative content analysis focused on broad understanding of each event as they unfolded, more akin to a literary ethnography (Van de Poel-Knottnerus and Knottnerus 1994) than a linguistic analysis.

In order to achieve broad understanding, articles were qualitatively analyzed and coded based on thematic and discursive content as experiential narratives were portrayed

in news articles covering each community. The three-part coding schema emphasizing passages describing disruption and deritualization, reritualization, and self-reflective statements guided initial coding of news texts. Passages were coded as disruption if they referred to processes or conditions which were potentially damaging or disruptive to the performance of RSPs. Deritualization was identified largely through quoted statements which referred to the loss of meaning, value, order, purpose, or otherwise negative conditions regarding the disruption of rituals. Reritualization was coded as passages which described or referred to the reconstruction of old rituals or the production of new rituals. Finally, self-reflective statements were identified as commentary regarding disruption, deritualization, and/or reritualization. While this constitutes a deductive approach, the coding schema and themes within each coding category were refined throughout coding and analysis processes in order to develop a more nuanced understanding of each community (Holtz and Wright 1979; Strauss 1987).

**Table 2. Visual Demonstration of the Coding Schema**

<i>Disruption and Deritualization</i>	<i>Reritualization</i>	<i>Self-Reflective Statements</i>
-Processes or conditions which disrupted RSPs	- Reconstruction of disrupted rituals	- Commentary regarding effects of disruption, deritualization, and/or
- Passages describing loss of meaning, order, value, purpose, structure, or other conditions of deritualization	- Generation of new rituals	reritualization

Analysis of articles following this procedure allowed for the construction of recovery narratives for each affected community. These narratives were based on subjective interpretations of news articles as coded through the schema based on SRT previously outlined. Passages in news articles were coded for statements which would fall within parameters of the coding schema. Within each coded classification each qualifying passage was then sorted within category for similar themes. These themes included, for instance, statements regarding disruptive conditions, the nature of experienced deritualization, the kinds of RSPs engaged in which constituted reritualization and their nature (i.e., informal or strategic, individually or collectively performed), and statements regarding effects of deritualization and reritualization. Latter themes included similar RSPs performed within and across different communities. This strategy allowed for broad trends regarding ritual dynamics to be identified during each disaster as well as determination of the relative importance of types of RSPs throughout reritualization processes. Finally, by determining these dynamics within each community in this way, it was possible to make comparisons between communities at multiple levels across time.

## **Conclusion**

This chapter has outlined the methodological approach of this study, which may be described as a theoretically grounded qualitative content analysis. Principles and concepts from SRT informed the theoretical framework as outlined in chapter 2, and were used to construct a coding schema emphasizing disruption, deritualization, reritualization, and self-reflective statements regarding these processes. This schema was applied to news media articles sampled from multiple newspaper outlets covering the Joplin, MO and Moore, OK tornadoes. Articles were coded in such a way as to reconstruct thematic

narratives based on ritual dynamics for each disaster in order to compare general trends and specific ritual practices between communities. The following chapter will present narratives based on ritual dynamics, general findings from the broad coding schema, as well as the specific themes which emerged within each coding category.

## CHAPTER IV

### RESULTS

With theoretical concepts and methodological considerations discussed in previous chapters, this chapter will focus on patterns that emerged in the data which speak to research questions raised in this work. To reiterate, disasters may be reframed using structural ritualization theory as patterns of disruption, deritualization, and reritualization. Disruption refers to events or conditions which disturb ritual dynamics for a social unit. Disruption can sometimes result in deritualization, a process wherein rituals are suspended with the order, meaning, value, and structure provided by those rituals also being disrupted. Finally, actors may engage in reritualization, which entails the reconstitution of suspended rituals and/or the generation of new rituals, which restore or reform order and structure associated with those rituals.

These patterns informed the schema which was utilized to code data that will be explored further in this chapter. To summarize, this schema was utilized to thematically code text on the basis of three primary criteria: 1) statements regarding disruption and deritualization, 2) statements regarding reritualization, and 3) self-reflective statements

regarding the underlying importance of disruption, deritualization, and reritualization. When applied to the 1,793 sampled articles (1,246 articles covering the Joplin tornado, and 547 articles covering the Moore tornado), it was found that 14% of all articles sampled contained statements regarding disruption and deritualization, 34% of all articles sampled contained statements regarding reritualization, and finally that 32% of all articles contained self-reflective statements about disruption, deritualization, and reritualization. Further details may be found in the table below.

**Table 3. Descriptive Statistics of Coded Media Articles (Proportion of total articles)**

<i>Community</i>	<i>Disruption/Deritualization</i>	<i>Reritualization</i>	<i>Self-Reflective</i>
Joplin ( <i>Joplin Globe, Kansas City Star</i> )	13%	37%	35%
Moore ( <i>Moore American, Daily Oklahoman, Norman Transcript</i> )	17%	26%	24%
Total	14%	34%	32%

This chapter's organization will generally follow SRT's model of disaster by exploring the ways in which each community experienced disruption, deritualization, and reritualization. Patterns of ritual dynamics along these criteria will be described as they were thematically coded, with similarities and divergences emphasized as they emerged. Samples of raw data are found in Appendix A of this document, and will be referenced where appropriate. Tables found in Appendix A do not reflect the entirety of raw data,

rather a selection of data, as inclusion of every data point would yield cumbersome quantities of information. These data points were numerous and often consisted of one sentence referring to activities which would be detected by the coding schema. This chapter features data points synthesized and discussed thematically with exemplar quotes from data will be used to demonstrate each code.

## **Disruption**

Regarding disruption and deritualization, media attention from sources covering the Moore tornado were more sharply focused on the loss of life, particularly at the elementary schools, and exploring potential policy changes. Sources covering the Joplin tornado, particularly the Joplin Globe, on the other hand, focused more attention on human interest stories which featured more discussion on residents' daily lives and their perspectives on what the disaster entailed. Further, articles which featured discussion of disruption and deritualization tended to be more densely concentrated towards the beginning of the sampling window.

**Table 4. Patterns of Disruption and Deritualization Following the Joplin and Moore Tornadoes**

<i>Theme</i>	<i>Summary of Theme</i>
<i>General Disruption</i>	Disruptions relating to social and environmental conditions
<i>Housing</i>	(Joplin) Market constraints, price gouging
<i>Looting and Scamming</i> contractors	Property theft, scrapping of metals, and fraudulent
<i>Deritualization</i>	Ontological insecurity, identity disruption, inability to cope abnormal behaviors

Table 4 above summarizes broad patterns of disruption and deritualization which will be explored in the following section. This section will identify and explore general patterns of disruption experienced by both communities as they appeared in data, which in many cases occurred in the moments, days, and weeks after each tornado, as well as two other patterns of disruption which persisted throughout the sampling window to varying degrees.

### *General Disruption*

Many articles spoke to conditions which were disruptive at multiple levels, but did so in non-specific ways. This section will synthesize and summarize some of those common disruptions which were experienced by many during both disasters. Examples of data demonstrating general disruption are found in Table A1 in Appendix A. These disruptions were prominent in the homes and businesses of members of each community. The importance of these rituals as they were reconstructed will be expanded upon later in this chapter, but certain aspects of disruption of these rituals will be discussed here as well.

Both the Joplin and Moore tornadoes did considerable damage to residential areas of each city. While many articles spoke in broad terms regarding the nature of destruction to personal property, assessments of the life course changes in the immediate aftermath of each tornado were community oriented, rather than individually or familially oriented. However, there are a number of dimensions of ritualized practices that take place in one's home which were disrupted for many. Personal daily routines, such as hygiene, dining, or leisure activities are fundamentally altered if the environment in



which they are practiced is changed. These rituals may also be shared with family members or loved ones, and were further disrupted if a family member or loved one was hurt or killed. Similarly, the loss of a pet would coincide with the disruption of a number of rituals performed in service of or in conjunction with the pet. Disruptions related to animals were not exclusive to residential areas, however, as ranchers in the areas surrounding Joplin contended with livestock grazing near insulation strewn from destroyed buildings. Finally, residential damage included the loss of personal memorabilia and/or mementos, such as family photographs, family bibles, or other priceless and symbolically significant objects.

Destruction of local businesses was also disruptive in that businesses also serve as locations in which rituals are performed. For instance, much of a person's day may be organized around work, and the loss of one's place of work - whether an employer or employee - was highly disruptive in terms of daily ritual structure. The temporary or long-term closure of businesses was also disruptive to those who patronized those businesses. This had particularly disruptive effects depending on the business, for instance, as food markets were no longer available in some areas, or major locations of leisure (e.g., restaurants, movie theaters, and/or clothing shops), all associated rituals were also disrupted. These business closures had cascading effects to other aspects of daily life. For example, discontinued access to food market could disrupt nightly dinner in households that did remain, or similarly a night out for dinner was simply not possible – both examples of dining rituals which also serve as opportunities for individuals to connect with one another and share experiences and companionship. Additionally, medical centers in both communities were damaged considerably. St. John's Regional

Medical Center in Joplin was damaged to point of closure, as was the Moore Regional Medical Center.

For Joplin, disruptive conditions relating to infrastructure led to social disruption in a variety of ways. For instance, “Boomtown Days,” a regional festival was suspended to divert resources that would have been utilized on the event towards response and recovery efforts. Local golf, tennis, and baseball tournaments were either canceled or moved to other venues. As mentioned above, there was also varying degrees of disruption regarding the Fourth of July holiday celebration, with some individuals not engaging in celebrations, though a regional celebration was held. Interestingly, Moore did not experience similar social disruptions, which will be explored in greater depth in a later section.

Environmental factors also contributed to disruption in both communities to varying degrees. In the days following both the Joplin and Moore tornadoes, additional severe weather struck each area. This weather featured heavy rain and lightning, and caused problems for first responders during search and rescue activities. One first responder in Joplin was struck by lightning during one of these storms and eventually succumbed to those injuries. Weather patterns normalized in the weeks following the Moore tornado, but the Joplin area was then affected by unusually warm and dry weather, which again caused problems for volunteers while cleaning and rebuilding the community. One Joplin volunteer perished after a heart attack, and it was speculated that strain in the heat was a contributing factor. The heat and dryness were also severe enough to ban fireworks in certain areas throughout Joplin, which affected Fourth of July celebrations for some. While actual weather patterns never reached severe levels (i.e.,

more tornadoes) in each community in months after the tornadoes again, community members experienced considerable strain at the potential of additional severe weather, which will be explored further in a coming section.

### *Housing*

Considerable damage was done to Joplin's residential areas, leaving thousands of individuals and/or families displaced. Restoration of housing was an issue that complicated Joplin residents for much of the sampling window. Samples of data coded for housing issues beyond those included in this section are found in Table A2 in Appendix A. These problems stemmed from economic constraints in the local market and regulations regarding procurement of federal funding.

One problem that emerged quickly in the aftermath of the Joplin tornado was a profound lack of apartment and rental housing. This resulted in many having to seek new temporary or long-term residence outside of the city, or left some without a place to live altogether. This strain on the demand of the local housing market also enticed some to exploit survivors in need of shelter. There were reported instances of landlords selling rental homes during the height of demand for homes with little to no warning for current tenants, resulting in further displacement. These instances were seemingly not isolated cases, as a Jasper County Circuit Court noted a "sharp rise in disputes between renters and landlords" in the weeks after the tornado. In addition to instances of rental homes being sold, pricing for apartments in the Joplin area increased considerably, which eventually resulted in files charged against at least one landlord for price gouging at two apartment complexes.

Another persistent disruption regarding housing resulted from policy regulations around procurement of federal funds for recovery. These policies required debris cleanup to be completed in a timely manner, in practice this was carried out by local Joplin officials placing holds on new construction in order to focus efforts entirely on debris removal. These holds were put into place temporarily at first, then formally approved by the Joplin city council for an additional 60 days after June 20, leaving Joplin residents unable to acquire permits for new construction for nearly three months following the tornado. These policies were a source of ongoing frustration for many residents during the sampling window. One homeowner described dissatisfaction with the building hold because it left his partially damaged home at risk of being unsalvageable, where new roof sections would completely restore his home. Another described the effects of the building hold in this way: “all I’ve been thinking about is getting my house built, and it’s been the hardest part for us, because they put the 60-day hold on us...that puts us two extra months in a hotel room.”

The issue of building restrictions was cited often at city council and town hall meetings, until finally restrictions were lifted ahead of schedule on July 28. While it is likely that Moore experienced issues relating to displacement and housing, as residential areas were also heavily damaged, they were not reported in the data to the same extent Joplin’s housing issues were. One possible explanation for similar issues not affecting the Moore community could be its relatively close proximity to other urban and metropolitan areas, which could better accommodate the demand for temporary housing following the tornado.

### *Looting and Scamming*

Both communities experienced social disruptions in the forms of looting and scamming following each tornado. While reports of post-disaster crime are often overblown or exaggerated in media (Dynes and Quarentelli 1968; Wenger, Dykes, Sebok, and Neff 1975; Tierney 2003; Tierney, Bevc, and Kuligowski 2006), these instances will be reported here as they appeared in sampled news reports and potentially impacted individuals within one or both communities. While samples of data will be provided here, additional samples of data coded for looting and scamming are found in Table A3 in Appendix A.

There were numerous instances of theft and looting in both Joplin and Moore. Joplin authorities reported 56 arrests for theft in the month following the tornado, though they noted that this number was not higher than usual for when compared to similar time periods from previous years. Thefts took multiple forms, with some simply pocketing items as opportunities presented themselves, and others posing as participating in recovery efforts while engaging in more nefarious activities, such as scrapping. Scrapping refers to a specific form of looting wherein certain salvageable metals are selectively picked from others' belongings and sold as scrap metal for profit. Following the Joplin tornado, three Baxter Springs, Kansas firefighters who were assisting with response efforts were fired after investigations determined they had engaged in "theft of businesses" during their time in Joplin. A spokesman for the Moore police department described one incident of opportunity as involving "...two homeowners walked up on their house...and they saw two people going through their stuff and putting things in their pocket."

Instances of scrapping were featured in the data for both communities. In Joplin, for instance, one Kansas City resident operating under the guise of volunteering was discovered stealing computers from the damaged Joplin elementary school. Another similar instance involved a duo stealing air conditioning units from damaged residential areas. Another individual posing as a FEMA contractor working in the Joplin area was discovered to be scrapping metals from household appliances. One Joplin police officer recalled encountering another group with a truck bed "...full of metal, mostly copper wire..." which the men had seemingly taken from damaged structures in the area. Similar scrapping occurred in Moore, with the city manager noting that individuals engaging in scrapping were "...causing problems..." by congesting roadways and not contributing to clean up while others might.

Other deviant behaviors that contributed to disruption following both tornadoes involved scams of various magnitude. One small scale scam involved a man posing as a victim of the Joplin tornado and requesting shelter in a person's home wherein he stole items and sold them for profit later. Similarly, a man in Moore falsely posed as a firefighter and claimed to have lost his home in the tornado in order to solicit donations. More common scams involved insurance and property based scams. Perhaps the most common of these scams in both Joplin and Moore communities involved fraudulent contractors, who solicited cash in advance for work, such as cleanup or repairing property, that was never done. Contractors operating without licenses were fined in both communities, with one Moore official summarizing the prevalence of these activities by stating "each of us are writing three or four citations a day." A more elaborate scam was attempted in Joplin by individuals posing as contractors offering contracts for yard

cleanup. The contracts were later altered to indicate property ownership being transferred from the homeowners to the contractors. Local authorities were able to identify this scam and those forged contracts were voided.

While reports of looting and scamming were featured somewhat frequently, considerable effort was given to alert residents of these activities and offer safeguards. All media outlets sampled offered guidelines for selecting reputable contractors and encouraged individuals not to feel pressured into signing contracts they were not comfortable with or if a contractor had failed to produce a license. Law enforcement officials in both communities instituted curfews in order to curb looting throughout the night.

### **Deritualization**

With multiple aspects of disruption highlighted in the previous section, deritualization as it appeared in data will be explored next. Deritualization refers to the loss of meaning, order, purpose, value, and/or structure that ritualized symbolic practices provide when those rituals are disrupted. Deritualization is not necessarily inevitable and may affect individuals or groups to varying degrees and for varying durations, but there were many passages in media narratives which indicated varying degrees of deritualization amongst community members (additional samples of data coded for deritualization may be found in Table A4 in Appendix A). Within media narratives, descriptions of deritualization were most often found in quotations taken from interviews, and tended to be linked within media texts with some aspect of trauma.

The disruption and deritualization felt by some seemed to have effects on individuals' sense of ontological security, which refers to a person's organizing worldview and the ways they make sense of things. One Joplin resident wrote the following in the days following the storm: "The old joke that you can tell someone was from the Midwest if they went to the porch with their video camera when the sirens sounded isn't funny anymore." Others, such as one Moore resident, were more generally disoriented by these conditions, describing their neighborhood as "...a war zone, an absolute war zone." Another Moore resident similarly reflected: "...I actually got lost because there was still debris flying everywhere through the sky...I got lost trying to find my street." Another Moore resident expressed trepidation upon learning that a riding stable they had operated was not going to be rebuilt: "what am I going to do? It'll be emotional. It's a way of life for me. It's not a job. My way of life is going to change dramatically." For these individuals, deritualization was experienced in sometimes quite profound ways regarding the structure and order in their lives.

Some RSPs which would otherwise be performed are not performed with the same symbolic significance. One photojournalist in Joplin described their personal state as not feeling "... comfortable with taking photos of another person's tragedy..." though feeling compelled to do so to document the tragedy. On the eve of Joplin's Fourth of July celebration, for example, one resident wrote in an editorial column that some in the community have "...nothing to celebrate..." and urged the Joplin community to forego celebrating the holiday altogether and instead focus on recovery.

The loss of the senior citizens' center was a considerable source of deritualization amongst Joplin's senior citizens. The center served as a site for numerous RSPs which



fostered a sense of community amongst those in attendance. One Joplin resident described the center and the RSPs engaged in there in this way:

“My husband and I are getting in worse health, and it was good to get out of the house and see people and get a hot meal...it kind of got to be part of our daily routine. You get to know people, and you have little jokes with them...to me, it’s a very important place where they can go have fun and get a well-balanced, nutritious meal and enjoy fellowship.”

When describing the effects of no longer being able to go to the senior center, one associate with the center said “when they can’t come to the senior center and see that ‘Oh, my friend Marge is here,’ it can add to the stress that they’re already in, not knowing whether their friends are OK.” The Joplin senior center was not re-opened in the timeframe of the sampling window, and those affected likely experienced deritualization of this nature for prolonged periods of time.

A general sense of social disruption was too much for some to cope with, resulting in deritualized conditions. One Joplin resident whose home was partially damaged but not fully destroyed described a sense of guilt and helplessness by “...lay[ing] on the couch. I thought I’d go bonkers; not because of what happened to me, but because of what happened to them. Everybody else lost so much.” These sentiments were closely echoed in an opinion article written by a Moore resident following the Moore tornado, who described crying “...tears of guilt, knowing that my family has been spared while others have suffered so deeply.” Another Joplin resident described the effects of close proximity to disruption in this way: “we have to drive through the (disaster) area to get home, and for a while, my wife bawled every time she went through there, and the kids have been affected by it too.” Another Joplin parent described similar

trauma affecting their children, particularly “...When storms hit, my kids are terrified...a lot of those emotions don’t come out until there’s a sign of a storm or a storm. My children keep a lot of that wrapped up.” Moore parents reported similar consequences for their children, with one parent noting problems occurring “...when the weather changes, they start getting freaked out. My six-year-old, he had a nightmare one day and was sleepwalking in the garage, pulling on the car thinking we were going to leave him. I believe that is a result of the trauma that he suffered...” due to the tornado. These patterns could be considered avoidance behaviors or intrusive feelings using other classification schemas, but may also be symptoms of the loss of order brought on by deritualization.

Other abnormal behaviors emerged amongst other Joplin residents which could be attributed to deritualization and the accompanying loss of purpose and order. Domestic violence incidents increased considerably in Joplin following the tornado when compared to 2010’s rates. A Joplin psychologist speculated that these deviant behaviors could have been the result of heightened stress in the community, even by those who were not directly impacted by the storm. They went on to state that many “...were not prepared to experience what they went through...” and that in their view the loss of “...some of the touchstones that ground us ...” - such as a favorite grocery store or restaurant - were taking a toll on Joplin’s residents.

### **Reritualization**

With elements of disruption and deritualization highlighted thus far, the following section will identify key ways in which ritual dynamics changed during reritualization. Data will

be demonstrated here by thematic code within the reritualization criteria of the coding schema. Put differently, patterns of reritualization will be discussed for each community as they were thematically similar.

**Table 5. Patterns of Reritualization Following Joplin and Moore Tornadoes**

<i>Theme</i>	<i>Summary of Theme</i>
<i>Symbolic Restoration</i>	Flag flying, (Moore) cemetery restoration
<i>Summer Youth Programs</i>	Sports camps, (Joplin) theatre and arts programs
<i>Food and Dining</i>	Volunteers establishing temporary eating locations
<i>Concerts, Benefits, and festivals</i>	Various benefit concerts, Independence Day celebrations
<i>Clyde's Place</i>	(Joplin) Temporary community with own ritual dynamics within Joplin's broader community
<i>Pets</i>	Reuniting pets with families, adoption of displaced pets
<i>Photographs and Memorabilia</i>	Reuniting family photographs and memorabilia
<i>The School Year</i>	Collective RSP signifying a considerable step towards normalcy

Table 5 summarizes themes of reritualization which will be explored in the coming sections. To reiterate, these sections will highlight exemplar examples from data to demonstrate each theme, with additional examples of data within each theme found in Appendix A, which will be indicated in each section.

### *Symbolic Restoration*

In the moments and days following each tornado members of each community engaged in reritualization which was highly symbolic in nature. Put differently, earliest patterns of reritualization involved RSPs which were high in salience, not necessarily behaviorally intensive, and were often directed towards each community and bolstered a sense of collective identity. Examples of these symbolically significant RSPs will be provided here, with additional samples of data coded for symbolic restoration are found in Table A5 of Appendix A. These initial patterns of reritualization were strikingly similar amongst residents of both Joplin and Moore.

Flag flying was one RSP which was engaged in almost immediately following each disaster. When considered in the context of massive disruption and deritualization, for instance with individuals combing through remnants of a completely destroyed home, these were highly symbolic behaviors that seemed to serve a morale and identity boosting function. One Joplin journalist noticed flags being flown amongst destroyed buildings in the hours after the storm, followed by "...a couple dozen..." the next day, who also noted "...that really struck me. I just started snapping pictures." Identical behaviors occurred following the Moore tornado. Several Moore residents established temporary flagpoles and flew flags, sometimes even tattered ones. "It represents our spirit as Oklahomans and Americans...we're proud and we'll be back," one Moore resident said of the flags. When asked about why he flew a flag on a makeshift flagpole, another Moore resident said it was because "...you can't break America. Mother Nature can't even beat us down." These self-reflective statements articulated the importance of these symbolic acts in bolstering a sense of identity, which could be interpreted as initial steps towards restoring

a sense of cohesion and unity amongst community members. Flags were flown at half-mast in each community for several weeks following the tornadoes.

Joplin and Moore high school graduations featured speeches that reflected similar themes to those that emerged while flying flags. Particularly, statements which were reflexive towards the community which emphasized the importance of resilience in adversity were common in both communities. One Moore graduate summarized these notions succinctly by proclaiming that “we’re damaged, but we survived...we’re hurt, but we’re resilient.” Additionally, Moore elementary school hosted a symbolic end of the school year event to allow teachers and students to come together one more time in light of the disrupted nature of the end of school year; classes were canceled following the tornado. Students at the event were happy, and one teacher said “...it meant everything,” when describing the significance of the meeting for students and teachers.

Finally, there was an organized effort to restore the Moore Cemetery, which sustained considerable damage, in a timely manner. This effort served two primary functions. The first was to enable the families of those who perished to conduct funerals - another highly salient RSP. Additionally, the cemetery was cleaned and restored before Memorial Day, which allowed for the observance of that holiday. One volunteer noted that it was important for those that contributed to clean the cemetery for these reasons and that it yielded “...a united feeling...this is our world; our everyday community.”

### *Summer Youth Programs*

Both the Joplin and Moore communities featured youth summer camp activities of various sorts. Most common of these were sports camps featuring basketball, baseball,

golf, or football. Motivations for engaging in the work necessary to facilitate and host events like these, particularly in the context of disruption and deritualization, were telling. For instance, in Joplin only a few weeks after the tornado one volunteer said that “...we want to restore the life and the laughter of a child, so that’s why we took on this project...” about efforts to restore a local baseball field. A one-day basketball program hosted by a volunteering NBA professional in order to give “...kids something fun to do.” An additional multi-sport camp hosted at a local university was conducted for similar reasons, with one coach highlighting “...right now we’re planning on bringing as much normalcy to the situation as we possibly can...” rather than simply drilling sporting skill sets. Joplin High School football summer programs were also held, which provided a sense of normalcy for both coaches and players, as one coach said “...it felt good to get out there and do some football stuff...hopefully, for a few hours a day, they won't think about what has happened to their city.”

Sports camps in Moore were shared in this purpose. One basketball coach who organized a camp in Moore noted that for those involved with hosting the camp “...it’s about getting back to some normality...letting him have a bit of fun. Getting back in the groove of what it is to be a six-year old. This is needed to get him back to some normality.” Another coach from the same camp echoed a similar sentiment by noting that “...the goal is to bring them in the gym, put a smile on their face and have them concentrate on having fun.”

Other summer camp activities beyond the scope of sport were also held, particularly in Joplin. For instance, the Joplin YMCA expanded an annual program featuring art, fitness, and sports in order to accommodate as many children from the

community as possible. The organizer of this event described the shift in focus for the program came when "...we started seeing kids at houses looking at the rubble, and they don't need to see that. So we kicked off our day camp early, knowing that there was a huge need." A secondary goal of the camp was to relieve parents focused on recovery efforts of the need to find childcare for the duration of the camp, even if this relief was short-term. A theater workshop was also conducted in Joplin, culminating in a performance of "School House Rock." Again, the motivations for holding the program extended beyond simply teaching acting or singing skills, as one director noted that they "...hope it gives them a sense of normalcy; it's also somewhat of an escape for all of us involved. We're going to keep plugging away."

Also noteworthy, though not part of any particular program, was a series of "parent planner" articles published by the Joplin Globe from late June throughout July. These planner articles identified various activities which would be occurring in a given week, even if they were not widely organized programs in the same ways some of the previously mentioned sports camps were. Activities featured photography classes, chess club, band or choir rehearsals, yoga, and reading sessions for young children, among others. Additional examples of data coded for summer youth programs are found in Table A6 of Appendix A.

### *Food and Dining*

There were a number of efforts to utilize food and dining to restore a sense of order, cohesion, and social solidarity amidst disrupted conditions. These efforts were featured with relative frequency in the Joplin Globe, and occurred throughout the sampling

window, though most saliently in the first few weeks to one month following the tornado (examples of these descriptions are found in Table A7 of Appendix A). On several occasions restauranteurs from other towns or regions (e.g., Texas or Louisiana) established temporary mobile kitchens in order to feed Joplin community members; in addition to feeding people, these events served as opportunities for co-presence, companionship, and a general sense of familiarity. One volunteer described one such mobile kitchen, which also hosted a night of music, as an opportunity to “feed the soul” of people trying to recover. Other mobile kitchens were placed in places of need, for example, one was established near medical facilities where nearby restaurants had been damaged that also featured an area where medical personnel could take a moment to eat. One such medical professional said that this area was significant because “...to be able to walk outside the doors and grab a sandwich and get back to work was great. It became a routine for us, and we were very appreciative to not have to worry about [acquiring food] ...” and that the individuals operating the kitchen “...were so upbeat, so uplifting. It was nice to get away from everything for just a little bit.”

A group of volunteers from Kansas City contributed in this way as well, by first cleaning a park in Joplin, which was “...considered a priority by the city in an attempt to get public places back to normal.” Following cleaning the park and establishing a place for people to “take a breath” the volunteers grilled lunch for anyone in the area.

Similar outpouring of support was demonstrated in Moore, with one local church leader likening dining volunteerism to that of “...a big funeral - the first thing people do is bring food.” Many churches in Moore and surrounding areas functioned as hubs for food distribution, and in some ways similar to the mobile kitchens established in Joplin,



offered individuals a place to rest. Another local church official said that their congregation “...wanted to give families the opportunity to get away with some peace and quiet and a place to take a deep breath.” These moments often coincided with distribution of needed resources.

### *Concerts, Festivals, and Benefits*

Numerous concerts and benefit performances were conducted on behalf of both communities. Many of these events occurred beyond the scope of each community – that is, in another town, city, or region – but appeared in the data as reports related to each tornado. However, a number of concerts and festival style events did take place within both communities. This section will highlight a number of these events, and additional samples of data coded for concerts, festivals, and benefits are found in Table A8 of Appendix A.

In Joplin, the “Miracle of Human Spirit” celebration was held in early July as a way for community members to enjoy an evening of music following the cleanup of a park. Joplin and surrounding communities hosted multiple Independence Day celebrations, despite reservations felt by some in the community. The City of Joplin hosted a “Rockin’ Fourth of July” event, which featured musical performances and fireworks, and gained additional notoriety due to a donation of a truckload of sweet iced tea from Rush Limbaugh, a television and radio host. An additional event consisting of a softball tournament and downsized fireworks display in celebration of Independence Day was also held in a small suburb of Joplin. These festivals were held to celebrate the

national holiday as well as to offer an opportunity to “de-stress” for those that wanted to attend.

Moore news outlets reported fewer instances of benefits and/or festivals, but those events that were reported were very large in scale and were highly salient. The most salient of these events following the Moore tornado was the “Oklahoma Twister Relief Concert,” which featured a number of high profile country and rock-and-roll musical acts. This concert was held on July 6th, and enabled individuals to also celebrate Independence Day in an exceptional way. Toby Keith, who organized much of the concert, said that he “...hope[d] this concert starts a healing point for everybody the best it can.” This sentiment was echoed by other performers at the concert, which was very heavily attended. A number of smaller benefit concerts were also performed in the region throughout the sampling window, and while they did not match the “Twister Relief Concert” in scale, they were aimed at performing the dual service of providing emotional and cognitive relief while also raising funds.

#### *Clyde’s Place*

One particularly interesting adaptation was made following the Joplin tornado that is worth noting here. As previously noted, housing was a prominent disruptor for many in the days, weeks, and even months following the Joplin tornado. One property owner opened a three-acre plot of land near Shoal Creek on the southwest edge of Joplin to those without homes and allowed them to camp. Over the course of several weeks, the camp came to accommodate 30 to 40 individuals on a given night, and came to be known as Clyde’s Place, after the name of the property owner. The camp developed its own

social order, being described by one resident as “...well organized and clean...” with many residents contributing some form of labor to “pay” for their stay, and Clyde came to be known as “the Mayor” of the small shelter.

In terms of reritualization, Clyde’s Place was particularly interesting in that it was a small community that was embedded in the broader context of the Joplin tornado disaster, and featured its own dynamics which would reflect an otherwise normal community. Residents at the camp engaged in typical personal rituals, such as hygiene and self-care, collective activities, such as discussions with others as leisure or downtime, and participated as workers maintaining order in the camp, as mentioned above.

The camp served as a temporary home for many in this way until they could find more permanent dwelling. To prevent the camp from becoming a permanent fixture itself, Clyde informed the camp’s residents that it would be closing in late August. This decision was made to encourage individuals to find permanent shelter before harsher winter weather came to the region. While other themes highlighted thus far (e.g., summer programs and benefits) were examples of strategic reritualization, closure of Clyde’s Place serves as an example of strategic deritualization, albeit with a desired positive effect of encouraging individuals to seek more robust permanent shelter.

### *Pets*

There were organized efforts following both tornadoes to reunite displaced pets with their families. In both Joplin and Moore these efforts began almost immediately, largely through local shelters, local officials, and the use of social media. These efforts were collective, and themselves can be considered a form of reritualization (samples of data

points coded for pets are found in Table A9 of Appendix A), but there are additional implications of restoring a pet to its family which were not published in media articles but are significant.

There are numerous RSPs which would be restored with the recovery of a family pet. For instance, there are numerous practices involving pet care which are ritualized, which would include regimented feeding, exercising, such as walking a dog, and grooming. Additionally, pets often hold considerable emotional weight within a family manifested in exchanges of affection. Exchanges of affection in this sense are two-way in that individuals may experience positive emotions which result from the exchange, which in the context of deritualization could work towards restoring some sense of stability. In fact, many of those who were identified in articles involving pets expressed feelings of relief and renewal in learning that their pet had survived the storm or upon newly adopting a pet which had found itself in a shelter following each ordeal.

One Moore resident exemplified this sentiment, which was expressed by many upon learning their pet had survived the storm: “it was a relief.” Several articles were published from each source with information regarding ways to alert authorities of missing animals or identify pets that had been found. Joplin hosted an “Adopt-a-Thon” for animals that had been rescued but not claimed, which was attended by many from surrounding regions. Many seemed to go to offer support in some way, with one attendee stating the animals “...[had] been through enough.” Again, this indicates that in some sense pets serve a function of restoring purpose and direction to individuals through the RSPs which are associated with caring for and living with them.

### *Photographs and Memorabilia*

Organized efforts emerged to reunite families with photographs and other memorabilia with families, not dissimilar to those efforts involving pets highlighted in the previous section. Again, these organized efforts constitute rituals, but there are also additional implications for the restoration of such items (examples of data coded for photographs and memorabilia are found in Table A10 in Appendix A). Many of these items, such as family photographs depicting a memorable vacation, a portrait, or perhaps loved ones who had passed away, or other objects such as a family bible or piece of art, are all resources for related RSPs. Put differently, a photograph depicting a family portrait, if placed in a prominent location, is an object that would be directly or indirectly interacted with potentially on a daily basis, perhaps even as a morning or nightly routine.

Again, social media was utilized to facilitate these items being returned to their owners in many cases. For instance, a “Joplin’s Found Photos” page was established on Facebook early in June, just a few weeks after the tornado, which allowed for found photos and other memorabilia to be posted for others to browse and identify owners. Again, strikingly similar patterns emerged following the Moore tornado in which individuals were aware of and interested in reuniting families with these objects, in some cases these efforts were aided by residents of Joplin who had experienced these processes during their own encounter with disruption of this nature.

### *The School Year*

Finally, the end of the sampling window coincided with the beginning of the school year following each storm. In terms of reritualization the beginning of the school year was

significant for each community, as both tornadoes occurred as the previous school years were ending, contributing to disruption and deritualization in those aspects of each community (e.g., schools in Moore cancelled the remainder of their school years in some cases). In other words, the new school year was a community level RSP which signified a return to a normal state in a significant and salient way.

Joplin elementary hosted preliminary events to allow students to view new classrooms and meet new teachers and staff. Students in attendance were described as being “...excited about school...” and that the semester beginning “...means a lot for them and for the community. It’s a nice way to make it a little more normal.” Another teacher described a sense of relief with the school year starting by stating “...we’re getting back to doing the things we love to do, which was exactly what we needed.” Another school official described the importance of school starting again for teachers and students:

“It seemed like, for whatever reason, everyone here was really, really ready...kids were eager to come back. Teachers were ready to be back. I don’t know if you could paint a better picture. I saw the big yellow school buses, and I got goosebumps.”

Teachers, students, and officials were similarly hopeful in Moore at the start of the new school year, particularly after the salient losses experienced by elementary students and teachers. One teacher noted that “...the focus is really about moving forward and finding our new normal...” for students and teachers. This new normal was sometimes faced with mixed emotions, with one school official stating that getting ready for the beginning of the new year was “...an overwhelming task, but we are surrounded

by heroes.” Following an emotional orientation meeting, another teacher hopefully noted “...I think it's going to be good for the kids to come back...they need to know that everything is going to be OK.” Table A11 in Appendix A features additional samples of data coded as new school year reritualization.

## **Conclusion**

This chapter has identified and demonstrated themes as they emerged from media data using the coding schema outlined in chapter three. Patterns of disruption were identified within several broad themes, including general disruptive environmental and social conditions, housing issues, and looting and scamming. Deritualization manifested most commonly in self-reflective statements about trauma inflicted by disruptive conditions; trauma in this sense could be interpreted as the loss of meaning, value, direction, or purpose brought on by deritualization. Reritualization was most frequently described in media data as collectively oriented, and took the forms of symbolically significant actions, various summer programs, food and dining activities, festivals, benefits, and concerts, the return of lost pets, photographs, and memorabilia, and for each community the beginning of the next school year. The following chapter will provide further commentary on these findings, with specific attention given to how these findings address research questions articulated in chapter two.

## CHAPTER V

### DISCUSSION AND CONCLUSION

Previous chapters have established the theoretical framework, methodological approach, and patterns of findings revealed by data. This chapter will first turn attention back to the research questions posed in chapter three and directly address each one as they relate to findings from chapter four. Limitations of this study in its current form will then be addressed, followed by directions for future research determined by this work. Followed finally by general concluding statements.

#### **Research Questions Revisited**

*What are the fundamental patterns of disruption and deritualization for individuals, groups, and communities associated with a disaster?*

Patterns of disruption were most identifiable in association with damages inflicted by the tornadoes – namely residential, business, and recreational aspects of daily life. Structural ritualization theory would argue that each of those areas of social life consist of plentiful RSPs. The loss of a home or a business structure may be considered a considerable loss to resources required for the successful performance of all of the RSPs which would take place there resulting in disruption of those ritual dynamics.



Disruptions related to housing were more persistent in Joplin when compared to Moore within the sampling window. This could possibly be due to Moore's closer proximity to large suburban and metropolitan areas, which could meet the demand for housing more adequately. Given that Joplin is a relatively large city for the region and these problems persisted, disruptions regarding housing and/or shelter could be more pronounced in more rural areas, which presumably have even fewer resources available to address exceptional needs like those brought on by disaster should they arise.

Scamming and, seemingly to a lesser degree, looting were other persistent issues of disruption for each community. Scamming in the form of fraudulent contractors was the most prominent of these issues. In regard to problems for reritualization or ritual dynamics more generally, scamming of this nature is problematic after disasters as it can sometimes profoundly delay the restoration of environmental conditions wherein reritualization would take place, such as a home or business. This was and is especially true when funds are taken, which may or may not be recoverable, and thus unable to contribute towards reritualization more directly. Looting was another disruptive issue in each community, though likely not at the same scale as scamming. Nevertheless, implementation of curfews, which both Joplin and Moore city officials utilized, and the potential for one's belongings to be stolen seemingly contributed to disruptive conditions.

Deritualization seemed to be experienced at individual levels in the cases of the Joplin and Moore tornadoes. For survivors of these storms deritualization manifested in a number of ways. Some spoke to a diminished sense of emotional stability, self-identity, ontological security, and ambiguity regarding future directions for their life. These conditions were resultant at least in part from the disruption experienced first- and

sometimes secondhand. Put differently, for some, simply witnessing disruption and deritualization experienced by others was enough to disturb their own sense of order and structure.

*How do individuals and communities engage in reritualization following a disaster?*

To briefly reiterate, reritualization refers to the restoration of old rituals or the generation of new rituals in order to restore or reform a sense of order, structure, and value that is lost or diminished by deritualization. Individuals and groups engaged in patterns of reritualization in a number of ways to address that end. For instance, both communities performed reritualization along symbolic bases by flying flags on improvised or temporary flagpoles. Statements made by those that engaged in or witnessed this behavior revealed the importance of flag-flying for bolstering a sense of identity and resilience when faced with disruption and deritualization. In other words, flags represented a “we” that was undeterred by the calamity at hand. These actions were sense or meaning making in nature, and contributed to the restoration of a sense of order; that despite disastrous conditions individuals and the community at large would persist. Other symbolically significant efforts along these lines included the restoration of the Moore cemetery – even before more hazardous debris was addressed in other parts of the city. The cemetery’s restored functionality enabled funerals and the observance of Memorial Day, both highly symbolic and significant rituals which also address some sense of meaning making regarding other tragedies, in this case the loss of life.

Considerable effort in both Joplin and Moore was directed towards restoring capacities for collective ritual performances. The previous chapter outlined a number of these collective actions, such as youth summer programs, festivals, concerts, and

dining/eating practices. A significant motivator underlying all of these actions was the restoration of some sense of normalcy for various segments of each community. While not said in terms of ritual, community members in each instance had some awareness of this motivation, and ultimately served the role of ritual sponsors in enabling and promoting the performance of these RSPs to varying degrees. While these are examples were collectively performed, they were likely significant for individuals involved in the performance, while also being important to a more general sense of reritualization at the community level. Untangling RSPs as solely individual or collective is not possible with this data, though such untangling may not be necessary in this particular study.

Consistent with previous SRT literature on dynamics of deritualization and reritualization, actors in both communities were active in reconstructing “normal” ritual dynamics throughout the time period being observed. Consistent across RSPs performed as reritualization was a significant infusion of symbolic meaning, which was present even when old rituals were reconstructed. For instance, rituals which would otherwise have been performed, such as the sports camps hosted in both communities, took on new symbolic importance in the context of disruption and deritualization brought on by the tornadoes.

*What temporal patterns of disruption, deritualization, and reritualization emerge following a disaster?*

Perhaps unsurprisingly, disruption and deritualization was most prominent immediately following each tornado, and seemed to reduce in consequence as time elapsed. There were disruptive conditions which persisted, for instance, housing issues in Joplin, and likely affected individuals beyond the sampling period. Also, while difficult

to identify with certainty, several quotations of individuals which were coded as deritualization spoke to loss of order and purpose, which was also likely to persist beyond the scope of the sampling frame. Further direct investigation into the interconnected nature of deritualization and trauma in disaster and other contexts would be beneficial to further understand these dynamics across time.

Action constituting reritualization also began almost immediately following each event, but altered in nature and increased in complexity as time elapsed. For instance, the flag flying behaviors that individuals engaged in could be described as requiring minimal resources, but were highly symbolically significant. As recovery efforts progressed more resources became available, which enabled performances of more intricate collective rituals. Examples of these more intricate rituals would include summer youth programs, concerts, festivals, and holiday celebrations. Increased complexity could also be seen in the mobilization of human capital in organizing efforts to re-unite individuals with pets, photographs, and other memorabilia. While more intricate and resource intensive, the symbolic importance of these activities was also high, particularly regarding reritualization and the restoration of order, structure, and/or value. As noted in the previous section, additional symbolic importance could potentially be explained by the salience of seemingly normal activities – such as sports, concerts, or other typical summertime activities – in contexts of disruption and deritualization.

*What evaluations may be made regarding the rank of RSPs throughout processes of disruption, deritualization, and reritualization?*

To briefly summarize, RSPs may be ranked based on their repetitiveness, homologousness, salience, and resources. There are certain limitations in relying on

media data to capture each aspect of RSP strength, but nevertheless observations may be made regarding RSP strength with the evidence at hand. First, there is evidence that many of the RSP events which were thematically coded occurred with relatively high frequency or repetitiveness. For instance, in both Joplin and Moore summer youth programs were highly repetitive, with at least five specific programs being mentioned in Moore publications, and six specific programs named in Joplin publications. However, in late June, Joplin publications included weekly “Parent’s planner” articles, which highlighted multiple additional activities for children to participate in, meaning that in Joplin repetitiveness of these activities was even higher. Given the intentional nature of these programs, as many noted they were directly oriented towards providing normalcy to affected youth, and the high repetitiveness with which they occurred, summer youth programs were highly ranked RSPs in both communities.

Similarly, concerts and benefits were mentioned in data with some frequency, indicating high degrees of repetitiveness. There are divergences however, when directly comparing repetitiveness and salience of benefits and concerts between Joplin and Moore. Joplin publications named 10 specific concerts and benefits occurring within the community, while Moore publications only specifically identified five. However, the concerts and benefits which were held in Moore were much more culturally significant and salient, as they included high profile celebrity performers, where Joplin’s benefits did not. In this sense, concerts and benefits were highly ranked in each community, but in different ways.

Even RSPs which were noted in data with less repetition could be highly ranked on the basis of salience. The clearest example of a low-repetitiveness/high-salience RSPs

were the highly symbolic flag flying activities which occurred almost immediately after each tornado. While these activities were not featured in articles which would indicate repeated performances, self-reflective statements were clear in that these activities were significant in restoring a sense of identity, purpose, and belonging in individuals for those who participated in these activities. These RSPs also seemed to only be performed in the immediate aftermath of each tornado, which could indicate that they were performed for specific ontological, morale, or identity purposes, which were either no longer needed or replaced by other RSPs as time passed.

Other activities, such as pet adoption and memorabilia being returned to owners, by their nature imply a high degree of repetitiveness and salience, even if small numbers of adoption events (i.e., two in both Joplin and Moore) were identified in each community. A pet, as described in the previous chapter, is interacted with on a daily basis in numerous ways – walking, feeding, playing, exchanges of affection, or high levels of physical co-presence – and should be considered a significant event in terms of RSP strength. Photographs and memorabilia did not feature specific events to return them to owners in the way adoption days were held with pets, however once returned to a family, these objects served as resources for other RSPs which may have been performed with some degree of repetitiveness, though this is not indicated by the data and must be inferred.

Similarly, the new school year for each community occurred at the end of the sampling window. While there is only one “start” of a school year, there is an underlying degree of repetitiveness as school activities are conducted on a daily basis. Additionally,

beginning the new school year was a highly salient marker, as it was a considerable step towards restoring normalized community level RSPs.

In sum, RSPs performed by communities during reritualization processes may be ranked by theme as follows on the basis of repetitiveness and salience: summer youth programs, concerts and benefits, pets, the school year, symbolic restoration, and photographs and memorabilia. The rituals which should be considered highly ranked identified here were typically collectively performed. This could be a function of the data utilized for this study; as lowly ranked RSPs or otherwise seemingly insignificant acts are unlikely to be featured in media accounts. Further investigation into these kinds of RSPs is warranted, as seemingly mundane ritual practices can still hold considerable importance for the person or persons performing them, though a journalist may not be inclined to feature such practices in a news article.

*What is the relationship between reritualization and psychosocial trauma or other emotional states of individuals and/or groups?*

While difficult to evaluate with specificity, as levels of trauma were not measured, self-reflective statements like those highlighted in the previous chapter indicated that reritualization had an ameliorative effect on feelings of stress, anxiety, and/or trauma. Further, participating in RSPs throughout reritualization processes provided individuals with a directed sense of purpose, as revealed by self-reflective statements about holding various youth summer programs or benefit/fundraising events, for instance, which may have also reduced or altered feelings of stress or trauma.

Additionally, multiple self-reflective statements about symbolic RSPs, or other generalized statements about the resilience of each community made by community

members, seemed to have positive effects on members of each group. These statements often referred to a “we” – the group – persisting in the face of disruption and deritualization, which may have provided a sense of purpose, focus, or direction for those saying and hearing such statements. Similar statements were made after flag flying activities which indicated a renewed sense of purpose, belonging, direction, stability, and/or social cohesion.

*In what ways are RSPs strategically utilized during disaster conditions?*

Related to the previous question, many collectively performed RSPs seemed to be engaged in for the express purpose of restoring a sense of normalcy, or in terms within an SRT framework, restore order, purpose, direction, meaning, and structure to social life. Additionally, these rituals contributed to the enhancement of a sense of cohesion or solidarity, emotional states for those involved, and perhaps individuals’ identities. Many RSPs were strategically utilized to these ends.

Ritual sponsors and entrepreneurs were identifiable in relation to many of these collective RSPs. For instance, coaches and teachers were largely responsible for organizing and promoting the summer youth programs which were held in both Joplin and Moore, which would qualify them as ritual sponsors. Numerous charity events which occurred within each community, as discussed in previous sections, could also be framed as ritual entrepreneurship in that certain RSPs were leveraged to raise money or collect resources to assist in reritualization.

Finally, there was at least one example of strategic deritualization, in the case of the closure of Clyde’s Place in Joplin. This example of strategic deritualization is interesting in the context of SRT research because unlike other instances of strategic



deritualization, which were employed as a tactic to dominate particular groups (e.g., in the case of the Khmer Rouge), the stated goal of closing the camp was for the benefit of its residents in the long-term.

*To what degree are rituals transformative of identities for those performing them during reritualization processes?*

Individuals made self-reflective statements about identities which were found in the data on occasion. For instance, graduation ceremonies which were featured included statements directed towards “we,” volunteers who endeavored to clean the Moore cemetery also referenced “our everyday community,” and individuals who flew flags referred to the American flag as a symbol for “us.” Statements like these, which were directed back towards the group – the Joplin and Moore communities – were RSPs which increased the salience of those identities. These statements seemed to boost or bolster currently held identities with potentially cathartic effects. There were also implications about disaster experiences being folded into pre-existing identities, particularly in the context of reritualization restoring a sense of normalcy, but statements regarding the changing nature of an identity or identities, such as survivor, were less apparent in the data.

Deritualization seemed to have considerable impact on several individuals’ sense of purpose, direction, and identity as well. These effects were demonstrated by self-reflective statements dealing with dimensions of ontological security and ambiguous future prospects of recovery. Future research should focus on these dynamics, particularly whether these same individuals were engaging in reritualization activities or

not. This could more clearly indicate changes in identity as a result of deritualization and/or reritualization.

*How do rituals contribute to the development of therapeutic communities?*

Therapeutic communities are characterized in part by a heightened sense of solidarity. Patterns of reritualization outlined in the previous chapter reveal at least certain aspects about how this sense of solidarity may arise. Many of the RSPs which were highlighted in the previous chapter, and emphasized again in previous sections of this chapter, were performed with at least some aspect of community in consideration. Statements which were directed back towards members of each community and RSPs which were performed in service of others – the Moore cemetery cleanup, mobile kitchens in Joplin, the Joplin YMCA’s sense of collective responsibility in providing childcare, other summer programs aimed at restoring a sense of normalcy for children – are all likely to contribute to a heightened sense of solidarity and social cohesion.

These data reveal that ritual may be a fundamental component of development of therapeutic communities. Put differently, the heightened sense of solidarity, social cohesion, stability, and unity which are characteristics of therapeutic communities may be the result of the behavioral and symbolic performances of RSPs during reritualization processes. There is potential for future research exploring these dynamics, particularly as they relate to senses of individual or collective identities.

**Limitations**

This study is limited in certain ways, primarily due to the nature of the data utilized. Media data used in this way was well-suited for identifying broad patterns of behavior and identification of narratives of reritualization as they developed. However, it is

secondary in nature, which brings about certain drawbacks. First, all data were constructed by another author or authors, which means that data that were coded were first filtered through those authors personal perspectives, motivations, or biases by nature of their construction. These motivations would include the necessity to craft a compelling narrative in order to appeal to readers as a news product.

Along those lines, media data in particular is likely to focus extensively on a few key events, as these are the stories that may be of most interest to the outlet's readership. These key events, if these data are any indication, were those RSPs or activities which were collectively performed or imbued with some cultural significance. However, this means that there is great potential for some practices to go uncovered by media articles, in terms of RSPs this could mean that seemingly mundane practices performed by individuals – especially in more private contexts – were likely disproportionately filtered from the data before being sampled, coded, and analyzed by the researcher here, as they potentially did not fit into the crafted narrative. Additionally, because data is secondary no follow-up probes were possible, leaving “hints” of dynamics which might have occurred but were not written about in enough depth to fully analyze.

### **Contributions and Directions for Future Research and Practice**

This dissertation makes a number of contributions to SRT and disaster literature, and as an exploratory study, identified a number of avenues for future research. Within SRT, this work serves as another empirical demonstration of core concepts of SRT in a new context. Additional evidence was found for the ways ritual dynamics develop across time in exceptional circumstances characterized by disruption, deritualization, and reritualization, and for the ways ritual dynamics were leveraged for specific purposes

with concepts like strategic reritualization. A number of new areas of future inquiry have been identified which will also forward SRT research, such as the role of ritual dynamics in mental health and trauma mitigation, development of community identity, destructive reritualization, strategic deritualization with prosocial intent, as well as new ideas for methodological diversification within the perspective. Finally, this study has identified findings which may be used to develop various policy implementations, such as a community ritual health inventory, which could introduce SRT to policy evaluation and practice in new ways for the perspective, which will be explored later in this section.

An SRT perspective is valuable for the study of disasters for a number of reasons, and this study has contributed to that body of literature in several ways. First, as demonstrated by this study, SRT may be utilized as a standalone theoretical framework to gain new insight into the ebbs and flows of post-disaster experiences concerning individuals and communities by emphasizing ritual dynamics, and further, by reframing disasters experiences as patterns of disruption, deritualization, and reritualization rather than the traditional disaster cycle (i.e., preparation, response, recovery, and mitigation).

SRT also offers tremendous potential for synthesis with existing disaster perspectives and contributes to a number of growing lines of research in disaster literature. For instance, this study has contributed further evidence in the ways in which children are cared for after disasters (see Peek 2008, Peek and Fothergill 2008, and Fothergill and Peek 2017 for more in this area). SRT may also be synthesized with other ongoing theoretical developments in disaster research, such as social capital (Ritchie and Gill 2007; Ritchie 2012) and risk (Tierney 2014). It may also help explain how recovery occurs as a process towards certain states, such as a “new normal” (Abrams, Albright,

and Panofsky 2004), by exploring which RSPs are restored, altered, or abandoned during deritualization and reritualization. By emphasizing rituals in various ways, SRT offers understanding of behavioral mechanics that other theories may lack, but can help explain how those theories – social capital, risk, or new normal conditions – are carried out as social processes.

This study has identified a number of dimensions of ritual dynamics which were pertinent to the Joplin and Moore communities following substantial tornado disasters. A natural future direction for this research would involve direct investigation into these dynamics featuring the collection of primary data as these processes unfold in other communities affected by disaster. This would involve real-time collection of data aimed towards identifying additional patterns of disruption, deritualization, and reritualization, as well as individually and collectively performed RSPs, which may not have been featured in media articles.

Future research of this nature will benefit from additional data collection strategies and methodological approaches. Findings from this study can be utilized to develop interview guides and/or survey instruments, which could be implemented in more directed ways than were possible with this study. Developing an inventory or measurement instrument of ritual dynamics would allow other sophisticated analyses. For example, a study measuring a person's patterns of deritualization and reritualization practices along with psychometric measures of stress would enable more decisive statements regarding the effects of reritualization on mental health or emotional states in general.

Additional research utilizing an SRT framework should be conducted exploring additional hazard types in different contexts. This study focused on tornadoes, and there would be value in comparing emergent patterns of disruption, deritualization, and reritualization across other natural hazards. In fact, there is no reason within SRT that would indicate that patterns would be fundamentally different in different natural disaster contexts, but this needs to be verified. Future research should also apply an SRT framework to the study of technological, NaTech, and TechNa hazard types. For example, this study explored in part how ritual dynamics contribute to development of therapeutic communities. How might ritual dynamics be influenced by fundamentally different disruptive conditions which are more often associated with corrosive communities, such as an oil spill? It could be that the breakdown of community ties, often referred to as secondary trauma (Gill 2007), is a result of a lack of reritualization following such disasters. Alternatively, *destructive* forms of reritualization, such as active avoidance of others, or deviant behaviors such as domestic violence (which occurred at heightened rates after the Joplin tornado) or substance abuse, may contribute to a breakdown of social ties following technological disasters. Destructive reritualization, if uncovered, would introduce a new concept to SRT research.

In terms of practice, these findings can be utilized to develop a checklist for markers of reritualization which may be used by practitioners to assess the health of a community's ritual dynamics following disasters. Such a checklist would highlight the importance of certain kinds of RSPs like those identified above and provide a general timeframe in which those dynamics emerged. A community failing to engage in certain ritual markers may indicate dysfunction of some sort (though these findings will need to

be verified by additional research before such assertions should be made). A policy application of these findings would serve as a new contribution in the application of SRT concepts and research.

## **Conclusion**

In summary, this study has demonstrated an alternative perspective with which to conceptualize and study disasters. A framework grounded in structural ritualization theory was used to reframe disaster experiences as patterns of disruption, deritualization, and reritualization. Findings from this study reveal that performances of ritualized symbolic practices were significant throughout processes that have traditionally been described as response and recovery in disaster research. Individuals in Joplin and Moore engaged in reritualization nearly immediately following each tornado, first by performing RSPs which were symbolic in nature, and continued to engage in reritualization with increasing degrees of complexity as time progressed. These RSPs were performed in the context of acute disruption and deritualization brought on by each tornado, as well as more chronic disruptive conditions which resulted from various social and environmental conditions.

As an exploratory study, this work should serve as a first step in a sequence of many studies exploring these dynamics in the context of disasters. As such, a number of future directions for research have been identified which would expand understanding of ritual dynamics within SRT literature as well as disaster literature. These patterns should be explored and verified by primary data in different disaster contexts, such as other natural disasters and/or NaTech, TechNa, and technological disasters. These findings should also be used to develop policy suggestions regarding community health following

disasters and other disruptive events of various kinds. SRT, as demonstrated by this study, offers exciting utility and potential for understanding social dynamics of disasters in new ways going forward, and there is considerable work to be done.



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## APPENDICES

### APPENDIX A

#### Introduction to Appendix A

Appendix A provides examples of raw data in the themes in which they were coded. Application of the coding schema on media articles resulted in numerous, and often short-form, data points which were considered holistically in forming themes. Data points are presented here in limited form, as including all data points would yield an unnecessarily cumbersome document, but these samples do provide additional context for commentary provided in chapter four of this dissertation.

**Table A1. Data Coded as Disruption/Self-reflective (General)**

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#### *Joplin*

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- One of Joplin's two hospitals, St. John's Regional Medical Center, was knocked out of commission by the storm and its patients moved to Freeman Hospital West, to a makeshift medical center in Joplin's Memorial Hall or to other area hospitals.
- Significant portions of Joplin remained without power late in the morning and concerns have arisen about the city's water supply, with Missouri American Water issuing a boil advisory overnight. Onstott acknowledged that both food and water shortages may become problems as the crisis continues.

- That boil order remained in effect Monday [*May* 23] night.
- Authorities said two emergency workers were struck by lightning while trying to assist in the effort on Monday. Details about their injuries were not available Monday night.
- But just minutes after the 455 newly minted graduates of Joplin High walked across the stage Sunday afternoon at the Leggett & Platt Athletic Center on the Missouri Southern State University campus, the tornado sirens began to scream. The destruction that followed would leave the graduates and their families shaken, if not worse, and may come to define the passage of this class to adulthood.
- Graduating sisters Melinda and Sabrina Duncan were in their grandmother's car, on their way to Wal-Mart on 15th Street to pick up a graduation cake. They realized something was seriously wrong when they reached the store and found it was in a state of lockdown.
- "I was really scared, especially when we were in the storm shelter," Grant said. The lights were flickering on and off. "People were crying and trying to call their families on their (cell) phones, but not getting through."
- A text message from one of Malachi's cast mates led Murdock to Freeman Hospital West in search of his son. The scene was hardly an improvement from the pile of rubble that was the theater — it was a "madhouse," he said, with patients seeking treatment and a nearly overwhelmed staff juggling hundreds of injuries.
- "A lady came by screaming that so many buildings were just demolished. We (drove) south to see what had happened; about a block south is where we started to see damage. It was like the movies. Screaming people. Traffic jam."
- Many of us cannot even see the scenes on TV because we have no TV or our cable is down or the power is off. Loved ones around the world call and describe a bigger picture than we can see from our homes or offices. If, that is, we have a home or office left standing.
- About 1,000 New-Mac customers served by the Diamond Grove substation remain without power, as the co-op is still waiting on transmission lines to be

restored by KAMO Power following the devastating tornado that slammed Joplin Sunday.

- Like many other Joplin utilities, Cable One suffered a crippling attack to its infrastructure during Sunday's tornado. Melany Stroupe, public information director for the Phoenix-based company, said that engineers are still evaluating the loss to its network and has no timeline for service restoral. "The situation is somewhat murky," Stroupe said. "There are still some areas that we can't get into."
- Four Joplin schools were destroyed and six other buildings were damaged by Sunday's tornado, but the superintendent is vowing that classes will begin as scheduled on Aug. 17.
- The Hope 4 You Breast Cancer Foundation in Joplin has pledged \$10,000 to relief efforts, according the organization's president, Sarah Burkybile. The group has put on a five-kilometer race each June for the past three years but has canceled the race this year.
- Batman was among hundreds of animals left homeless by Sunday's tornado. Several agencies are working to find and house the wayward pets at shelters across the city.
- Emergency response officials acknowledged Wednesday that some mistakes were made in the handling of the dead in the immediate aftermath of the storm. Bodies were loaded into the backs of pickup trucks by well-meaning residents, hoping to help overwhelmed first responders, and taken to arbitrarily chosen collection points such as a church, according to Newton County Coroner Mark Bridges.
- Agricultural officials are warning Missouri farmers of the risks to livestock from fiberglass insulation strewn across fields after the massive tornado that hit Joplin. University of Missouri Extension officials say farmers should try to clear their fields as much as possible so cattle won't gobble up the insulation. While the insulation isn't toxic, it also isn't digestible, meaning it can cause blockages in the digestive system. Dr. Monty Kerley, of the university's animal science division, says the risk likely grows with the amount of insulation swallowed. Officials say



the other concern is that glass particles in the insulation could penetrate animals' intestinal tracts and cause a tissue reaction.

- Boomtown Days has been postponed. Organizers announced Thursday that the annual festival, which was to be held June 9-11, has to be put off because of the resources that must be committed to recovery from Sunday's tornado damage.
- Frustration over the release of the names of the dead, their bodies and the names of the missing is causing frustration for surviving family members in the wake of Sunday's deadly tornado.
- The Riverside police officer who was struck by lightning on May 23 after joining in the rescue effort following the Joplin tornado died today at a Springfield hospital.
- Marc Zimmerman, vice president of the Lakeland (Fla.) Runners Club, said he saw an online post recently from Runner's World magazine that Joplin's annual Boomtown Run had been canceled because of the May 22 tornado. The run is held in connection with the annual Boomtown Days festival, which also has been called off.
- Cleanup efforts after the May 22 tornado that struck Joplin have postponed next week's Buffalo Run Casino Classic at Peoria Ridge Golf Course.
- Christopher [*a volunteer*], though, went to another room to rest. When they checked on him later, they discovered he had passed away — they later would learn he had suffered a heart attack.
- The Joplin Fire Department announced a ban Thursday on the use of any fireworks this year inside the area designated for tornado debris removal.
- The 2011 Millennium Tennis Club \$10,000 Men's Futures tournament will not be held in Joplin this year because of the damage left behind by the May 22 tornado.
- The cities of Joplin and Pittsburg also prohibit the sale, possession or discharge of bottle rockets inside the city limits. Violators can be fined and the remainder of their fireworks confiscated.
- "I still can't stand to hear anything with a hum," he said, and his daughter is startled by the everyday sound of a toilet flushing.

- Knowing the threat of tornadoes was forecast for the metro area around 3 p.m., Moore School administrators had made the decision Monday morning that there would be no after-school activities beyond the regular sixth-period athletic hour.
- His brother, Tanner, 13, got out of the rubble with scrapes and bruises. "He is feeling guilty because he wasn't hurt worse," his grandmother said from her hospital room at Integris Southwest Medical Center. "He saw the carnage of his mom and brother," said Lee Ann Soulek, his aunt. "He remembers what happened."
- "My home did suffer some damage, but you go one street north of my home and it looks like a war zone, an absolute war zone."
- Missouri tow truck driver Tom McKellips came to the Moore area the day after the May 20 tornado to help haul off totaled cars but said an Oklahoma Highway Patrol trooper pulled him over and threatened to impound his truck after he had picked up his first load.
- Earlier this week, the hospital managed to reunite a donkey with its owner. Although the owner was happy to have her donkey back, her home and farm had been destroyed, so she was forced to put him up for adoption, Holbrook said.
- "You could feel it above you. It was crazy. Our dog is gone. She is somewhere. She is dead. We didn't even think it was going to go near us, so we were outside watching it," he said. "We dug an old lady out of my neighborhood. She was under all that stuff with a bike helmet on. She had pillows all over her."
- "I think a big need now is debris removal, and we will be working with Oklahoma on expedited debris removal and then we will be working with individual homeowners so we can get that debris out of there," Napolitano said.
- Then in the span of a few seconds May 20, a monster tornado pulled her memorial from the red earth and cast it, in pieces, away from her final resting place. Rosella's widower, Dean, tried to visit the cemetery earlier this week to check on her grave, but storm damage and emergency workers blocked the roads along Fourth Street.
- "We weren't allowed to leave until 5 p.m.," Southmoore teacher Spencer Braggs said. "When we got out, it was a disaster area. People say it's a war zone. I don't

think of it as a war zone. I think of it as a bomb just dropped on us. Just a solid bomb.”

- The city of Moore recycling center at 400 N. Telephone Road is temporarily closing due to recent storms. The recycling facility will be used for storm debris separation for environmental issues.
- Along with the loss of property, seniors may have lost important documents such as Medicare cards, medical records, medical bills and other financial records. MAP representatives can help victims obtain replacement cards and documents and answer questions about their prescription drug plans. They also can help those who suspect they may be a victim of fraud.
- Vehicles are scattered among the wreckage left by the tornado. If they remain unclaimed, the city is required to tow them and owners have to pay the expenses, said Steve Eddy, Moore city manager. Wrecked vehicles need to be towed, especially if they are blocking streets or right-of- ways, he said.
- Two of the wooden soldiers were torn from their mountings and knocked over, but two remained standing through the storm, Coss said. Three of the four statues’ rifles broke off, but everything that was damaged can be repaired.

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**Table A2. Data Coded as Disruption/Self-reflective (Housing)**

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*Joplin*

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- “It rained yesterday, and it leaked all inside my house,” said Testerman, a 65-year-old retiree. “We have no water, no power, no cellphone coverage ... and I don’t even know if I have enough insurance to do my roof.”
- She said that she is not allowing her clients to raise their asking prices in response to the increased demand for housing, but she said real estate agents have no control over individuals who opt to sell their own property. She also said she can

understand sellers wanting to get what they consider fair value for their homes, but taking advantage of the tragedy is “not the right thing to do.”

- Some questions have surfaced over a hold the city of Joplin has placed on building permits while an “expedited debris removal” project gears up in neighborhoods hardest hit by the May 22 tornado.
- Questions about demolition costs have kept some homeowners from signing right-of-entry forms sought by the city of Joplin to begin debris removal work on properties in the tornado-ravaged south-central areas of the city.
- Higginbotham alleges that he is being kicked out without warning or due process. Determined at first not to leave, he, his wife and their two daughters moved into the yard, cooking over a wood fire.
- Since the tornado, there has been a sharp rise in disputes between renters and landlords.
- A local attorney who lost both her home and her law office in the May 22 tornado will speak to the City Council tonight about her objections to a 90-day hold being placed on new construction while debris removal takes place in Joplin’s hardest hit neighborhoods.
- It is unreasonable and a disservice to those harmed by this disaster to deny them the right to rebuild and restore their lives as soon as possible, and denying building permits also denies jobs that are so badly needed.
- A heart-tugging drama unfolded Monday night in the Joplin City Council chambers as residents unsuccessfully pleaded for the council to reject a proposal to place a hold on the rebuilding of their homes.
- “Don’t do this to those people who have already suffered so much,” Jones told the council as he choked back tears. He suggested that the city instead expedite building permits.
- He has filed an application for a building permit, but it is being held up by the city’s 60-day moratorium imposed June 20 on new construction of single-family homes in the area with catastrophic and extensive damage. He filed an open-records request with the city to find out how many such permits are on hold. He

said the city administration replied to that request on Friday, and he learned that there are 11 permits on hold.

- At least 40 Joplin property owners have filed complaints with the Missouri attorney general's office — most about mortgage companies holding on to large insurance checks.

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*Moore*

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- Transportation continues to be a problem for some displaced residents, he said, issuing a plea to the public to find a way to help displaced residents staying in University of Oklahoma dormitories and other locations reach the church so they can obtain claims assistance.
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**Table A3. Data Coded as Disruption/Self-reflective (Looting and Scamming)**

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*Joplin*

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- City Manager Mark Rohr, in a news conference Monday, confirmed that police were investigating some incidents of looting. Standing by his side, Gov. Jay Nixon said every effort would be made “to make sure every piece of property is protected” and that “the rule of law is maintained.”
- Bad news seemed to be everywhere on Thursday. Making matters worse, Jeff Lehr, our crime reporter, received some police reports about folks who had been arrested for alleged looting. By the way, just a piece of advice: If you get caught looting, you probably should go ahead and plead guilty. I don't think you want to face a jury trial.
- Joplin police said there have been 56 arrests for theft in the area affected by the tornado. There also have been 291 “person crimes” in the area for things such as peace disturbances and domestic problems. Police said that number of thefts and

person crimes is not unlike the number that area would experience before the tornado.

- Most of the alleged looting incidents taking place inside Joplin's disaster area are being adjudicated in municipal court as misdemeanor offenses. Associate Circuit Judge Richard Copeland told the Globe that he has seen just a few felony charges related to looting filed in his division of Jasper County Circuit Court since the tornado.
- A state investigation was launched Tuesday into a report that someone has been soliciting yard-clearing jobs from Joplin tornado victims but using contracts that could convey ownership of the property to the contractor.
- In addition to that report, the city's recycling coordinator, Mary Anne Phillips, said that someone using fake credentials is asking to remove people's damaged appliances from their properties. She said a man is representing himself as a representative of the Federal Emergency Management Agency in order to gain access to residents' appliances and metals that can be sold at scrap yards.
- People may think they are signing a contract to remove debris. In reality, it's reportedly a quitclaim deed that terminates a property owner's interest and grants it to another person.
- Two men who allegedly were caught taking air-conditioning units from destroyed properties in Joplin's tornado zone have been charged with felony stealing.
- A 41-year-old Kansas City man faces charges in connection with allegedly stealing computers from a Joplin elementary school damaged in last month's tornado.
- Three firefighters in Baxter Springs, Kan., have been fired and their chief placed on administrative leave in light of a probe into looting of businesses in Joplin the night of the May 22 tornado.
- Joplin police subsequently confirmed that a probe into the looting of businesses the night of the May 22 tornado was begun more than a week ago based on information received from Baxter Springs police. The information reportedly involved three male firefighters from Baxter Springs. The Baxter Springs Fire Department was part of the massive emergency response to the tornado.

- The deputy told the court that the two men were loading the bed of a pickup truck with metal they had gathered overnight in Joplin when he pulled up at the storage business to talk to them. The bed of their truck was full of metal, mostly copper wire, which the deputy suspected had been taken from homes destroyed by the tornado. The deputy said that some of the copper wire the men possessed was “pretty obviously” telephone wire. An AT&T representative identified it as wire commonly strung from a utility pole to a house and said it belonged to the telephone company, he said.
- Survivors are being cautioned about scam artists coming out of the woodwork after the May 22 tornado. The Federal Emergency Management Agency says it’s important to be vigilant in protecting your property and money by looking out for those that want to take advantage of a dire situation.
- Joplin police have made about 100 arrests in larcenies and thefts in the disaster area since the May 22 tornado. Roberts said that is not disproportionate to what the rates were for those crimes in the same area prior to the storm.

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*Moore*

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- A man accused of posing as a firefighter and asking for money said he lost everything in the Moore tornado, court records show. David Ross Rester, 24, was charged Tuesday in Oklahoma County District Court with false personation of a public official, a misdemeanor.
- Police arrested two men on looting complaints Tuesday after homeowners saw the men and alerted authorities, said Moore Police Department spokesman Jeremy Lewis. “Two homeowners walked up on their house, it was a house that was totally demolished, and they saw two people going through their stuff and putting things in their pocket,” Lewis said.
- The Oklahoma Attorney General’s Office has received reports of criminals called “travelers” in tornado affected areas. These con-artists travel from state to state, preying on storm victims’ vulnerability. While several residents will want to clean their property, trim trees or begin to rebuild as quickly as possible, Attorney

General Pruitt warns them to be alert of these criminals who pose as contractors. Do not agree to pay cash up front for the entire job and use local, reputable businesses.

- Dorman said he and other state lawmakers who have been working with recovery efforts have already come across unlicensed contractors advertising their services, usually in person or by leaving their cards with individuals who have lost property.
- Police Chief Jerry Stillings said the most common form of looting now is by scrappers. They sift through debris looking for metals and other things they can sell.
- Scrappers clog the streets with vehicles and scatter debris back into the roadway. Stillings said they don't care about removal and clean up, they sling stuff everywhere trying to find items of value to sell.
- Tornado victims should not be bullied into signing contracts, Oklahoma Insurance Commissioner John Doak said Thursday at Moore City Hall. High-pressure sales and bullying are the most common complaints being registered by victims following recent storms.
- "Each of us are writing three or four citations a day," Copeland said. [*In reference to unlicensed contractors*]
- "Unfortunately there have been many reports of fraudulent collection of money and goods in our state that is allegedly collected for disaster relief for the storms in May," said McBride, R-Moore. "It is shameful that people concoct schemes to take advantage of the kindness of Oklahomans, but, unfortunately, this is the world we live in. We want to make sure people know how to avoid being victims and who to contact if they are."

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**Table A4. Data Coded as Deritualization/Self-reflective**

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*Joplin*

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- “I have nothing. It’s all gone,” she said.
- “It’s kind of hard to know what to feel,” said Grant, an 18-year-old who was invited to speak because she was among Joplin High’s top seniors. “Graduation is supposed to be a happy day, but it all quickly turned into this day full of devastation.”
- “I’ve lived there all my life, and I’m afraid to go back and find out who’s gone,” she said.
- “It’s weird because in the nice grass on the baseball field for example, there are tons of spears of wood just sticking out of it. It’s scary.”
- “Every time we hear thunder, we’re scared,” she said. “I think it’s always going to be hard, and I still have my moments where I break down and cry.”
- De Leon is troubled by nightmares and is urging his fellow survivors to get counseling, too. He knows that bodies and buildings aren’t the only things battered by the wind. “PTSD will be an ongoing issue for many.”
- She said she has been staying with a sibling and her mother, and has been suffering from anxiety. She said she has been overwhelmed by the things she needs to do.
- In my own home, our days have been completely reorganized around this disaster. Meals, bedtimes, activities and moods are all mixed up. We are floating along with the city’s changing pulse.
- That leaves Thompson just a few weeks to find a home. She said that her 7-year-old daughter was traumatized by the tornado and does not want to live in a house that does not have a basement.
- “The feeling I had was helplessness. I felt like here I am, kind of trained, but feeling totally helpless.”
- I have nightmares, my kids are having some problems accepting the changes and don’t want to see photos of the destruction (who can blame them?). My older daughters’ school was practically demolished so there is uncertainty about where they will attend school next year.

- The roof was gone, walls had collapsed, their car in the driveway was a mangled mess and one of the dogs was missing. Gone with it were their dreams for beginning life with their girls in that house.
- The woman said that for several weeks after the storm, she found herself crying a lot. Things are better now, she said, but the things she saw in those immediate days after the tornado and the stories she heard still bounce around in her head.
- Local psychologists say they are seeing increasing numbers of people with agitation, anxiety and depression. Patricia McGregor, a psychologist with Thompson and McGregor, of Joplin, has seen a significant increase in adult clients in the wake of the May 22 tornado.
- Even people who did not experience the tornado directly are dealing with vicarious traumatization because they have heard so many stories, and seen so many photos and videos of the tornado.
- "My husband and I are getting in worse health, and it was good to get out of the house and see people and get a hot meal," Drina Powell said. "It kind of got to be part of our daily routine. You get to know people, and you have little jokes with them."
- The center's meal-delivery program for homebound clients is still operating, but the rest of the programs typically offered have been temporarily suspended at the Joplin site. Those include weekday lunches, opportunities for socialization, cooling or warming centers depending on the season, and a variety of health and wellness programs, said Carolyn McLaren, executive director of the local Area Agency on Aging.

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- Oklahoma Highway Patrol trooper Betsy Randolph described the devastation as "the worst thing I have ever seen."
- "Some of the buildings ... that got destroyed are landmarks that you are used to seeing," Taylor said. "It almost gives you a feeling of being in a strange place when you drive by. You don't recognize it. It's not like home."

- Memories won't go anywhere, but Sally, still reeling from the disaster, doesn't know if she has what it takes to come back. Gary Garland, her brother-in-law, thinks she does. He can't imagine her doing anything else, but he knows it's a decision she will have to make as she moves in with her son and begins the long process of rebuilding more than just a home. With the faintest hint of a crack in her voice, Sally began to look toward a difficult future. "I don't know what I'll do now," she said. "You just put your faith in God, and he'll show you the way."
- "I got lost trying to find my street. Then got lost trying to find my house. There were no walls standing on the street. I got out of my car and I saw my husband holding one of my dogs in the middle of the street trying to wave me down. Our other dog started yelping and came out of the rubble somehow."
- "They say kids are more resilient, but we've had some challenging issues with the kids," Barnett said. "When the weather changes, they start getting freaked out. My six-year-old, he had a nightmare one day and was sleepwalking in the garage, pulling on the car thinking we were going to leave him. I believe that is a result of the trauma that he suffered in these last two tornados that we had."
- "They say, 'What are we going to do, what are we going to do,'" Steveson said. "I say, 'What am I going to do.' It'll be emotional. It's a way of life for me. It's not a job. My way of life is going to change dramatically."

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**Table A5. Examples of Data Coded as Reritualization/Self-reflective (Symbolic)**

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- She said a "summer send-off" will be held at schools not damaged by the tornado so that students can collect their personal belongings.
- As he was out in the damage zone, he noticed a lot of American flags flying.

- “My first day out, I started seeing flags. The next day, there were a couple of dozen; the third day, there were even more,” Caldwell said. “That really struck me. I just started snapping pictures.”

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- The first thing Kevin Gibson did after returning to his house, torn apart by a powerful tornado Monday, was pull an American flag and a temporary flagpole from the corner of his partially standing garage. The flag-raising seemed to hearten the neighbors, as if to assure them they would emerge triumphant from this disaster. With the remnants of their lives lying around them, Gibson recalled, the neighbors began applauding and chanting: "Yes sir! Raise that flag!"
- "It means we are still united, whatever happens," he said, the flag flapping in the wind as his family helped him pore through the wreckage for salvageable possessions.
- "It represents our spirit as Oklahomans and Americans," said Chris DeWitt, pointing to a flag a neighbor had planted on a basketball frame. " We're here, we're proud and we'll be back."
- In the wake of these terrible storms, we saw suffering and loss. But we also saw something else: an Oklahoma Spirit that would not be broken and would not be defeated.
- “The city of Moore is more than just a community,” Edwards said. “We are a family, if one gets knocked down we all get knocked down. We have done a lot in this short amount of time and I’ll be Moore strong forever.”
- The emotional morning began with a Remembrance Ceremony, which allowed employees a quiet time of reflection on the south, east and west Moore Medical Center parking lots.
- Moore police officers were honored Monday night at city hall for responding to Plaza Towers Elementary and saving lives following the May 20 tornado.

**Table A6. Examples of Data Coded as Reritualization/Self-reflective (Summer programs)**

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- “This year’s summer school is the first of many opportunities we have to begin the healing process and resume a sense of normalcy,” said Assistant Superintendent Angie Besendorfer.
- “We had a meeting last week and decided that the kids who wanted to start playing baseball, let’s get them playing baseball,” said Kirk Harryman, program manager for the Miners. “Nothing is going to be normal obviously right now. We want kids to do what kids do during the summertime instead of what they’ve had to deal with the last week. “It’s going to be a summer that obviously is going to have its difficulties, but we’re still looking forward to putting the best summer together we can for the kids.”
- Victims of Sunday's tornado may struggle to watch children while sorting through debris, cleaning up and running errands. The Joplin Family YMCA and other agencies are offering free childcare to help those families.
- Despite a deadly and devastating tornado that struck Joplin on May 22, the Joplin Golf Foundation has decided to hold its junior golf program through June and July. “The mission of Joplin Junior Golf has never been more apparent: continue to share our pastime with young people,” said Mike Wheeler, Missouri Southern golf coach and director of the junior program. “Give them some activity and play that shows continued normalcy in our community and in their lives.”
- As parents struggle to clear debris, salvage belongings, find places to live, deal with insurance companies and much more in the tornado’s aftermath, taking care of kids has gotten more difficult. To help, the Y tweaked its yearly summer camp program to assist. This year, the Y’s Summer Adventure Day Camp has expanded to include kids from all over Joplin.
- “We were sitting there, looking at our buildings, but there were already so many shelters, we wondered what we could do,” York said. “Then we started seeing kids at houses looking at the rubble, and they don’t need to see that. So we kicked

off our day camp early, knowing that there was a huge need.” One of the best parts of the program, York said, is that it lets kids talk to their peers about how they are affected by the disaster. “This is the best therapy they can possibly get,” York said. “Talking to their peers is not as intimidating as an adult.”

- The agony of the unknown finally came to an end Monday for Chris Shields, who became a football coach again. Even though he’s still looking for a place to live, like the families of many of his players, the start of Joplin High School’s football camp at Junge Field provided relief from what has become daily life in Joplin since the May 22 tornado.
- “It felt good to get out there and do some football stuff, to do what we love as players and coaches,” Shields said. “Hopefully, for a few hours a day, they won’t think about what has happened to their city.”

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- The National Basketball Retired Players Association will host a free youth clinic for tornado victims ages sixth-grade and under. The clinic is scheduled 4 p.m. Thursday at Moore High School. Former NBA All-Stars Otis Birdsong and Michael Ray Richardson and Tulsa head coach Danny Manning will conduct the clinic. The NBRPA will make a \$5,000 donation to tornado relief.
- More than 50 students from Briarwood and Plaza Towers elementary schools took part in the two-hour camp that taught skills such as dribbling, rebounding and defense. But its main purpose was to give children a reason to smile.
- “For us, it’s about getting back to some normality,” Barnett said. “Letting him have a bit of fun. Getting back in the groove of what it is to be a six-year old. This is needed to get him back to some normality.”
- “It’s very important, especially for youth, to have an outlet of recreation and fun in the midst of some difficult times,” Fielkow said. “Our mission is to give back to communities. It was an honor and a privilege for us to come to Moore and Oklahoma City and to be able to give back to some kids who need some fun and entertainment.”

- “When I sit and look at this, it’s unbelievable,” said Richardson, who now lives in Lawton. “To go to bed one night with everything in place, and the next day everything is gone. It has to be devastating. It’s really, really tough because these kids here have no idea what happened. What do you tell a kid? If we can just put a smile on their face, I think that’s big.”
- “This is our community, our state,” Manning said. “It’s a way for us to come back out and share some of that love. The goal is to bring them in the gym, put a smile on their face and have them just concentrate on having fun. Once they do leave this clinic, hopefully the memories of the experience will last for them. But the reality is that some of them will have to deal with the continued damage.”
- McCrae came up with the idea of Sooner Equipped. It’s a simple plan to fill a 53-foot semi-trailer with athletic gear and drive it across the country to Moore. “We want to make sure that those kids have Friday nights in Oklahoma,” McCrae said. “It’s a time they can get away from everything else. Football is great first aid. I just made a few phone calls, talking to coaches to see what we could do and before you know, it took off like lighting.”
- “If it helps two or 200, we’re hopeful that the camp can provide a little break and a few smiles to the kids of these schools,” Robison said. “There are a number of area coaches eager to volunteer their time for this camp and several coaches in the Dallas area also have expressed an interest.”
- It was the SaberCats' first official practice since May 20, when an EF-5 tornado broke the foundation of so many houses and turned the football players into a cleanup crew that helped their hurting community.

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**Table A7. Examples of Data Coded as Reritualization/Self-reflective (Food/Dining)**

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- The Taste Buds arrived from Louisiana on Tuesday morning, and spent the afternoon cooking and later serving a traditional menu that included spinach

salad, bread pudding, oysters, crab, jambalaya and alligator. They brought tractor-trailers of equipment, roughly 600 pounds of food, 30 staff members and area volunteers, and assembled a full kitchen on the stage in the park with the goal of feeding about 1,000 people.

- Powell, who said she moved to Eureka Springs, Ark., after Hurricane Katrina, said she had volunteer assistance in cleaning out her own home after the hurricane, and she remembers how important it is to “feed the soul” of the people living in the aftermath of disaster and those willing to help.
- While the necessities of living and relief efforts are provided by others, The Taste Buds can provide a few hours of distraction and memories of “good music and good food,” he said. “You go back to cleaning, and you go back to dealing with insurance companies,” he said. “But hey, wasn’t that fish good the other day? Wasn’t that music good? OK. Now let’s clean this room out.”
- “I took the car up there, opened the back hatch, and everyone came to get fruit, drinks, sandwiches,” said Hymer. “It was gone within two hours. Everyone was utilizing it so much, I thought we needed to set something up, get something going and stay there.”
- So Hymer began requesting tents, food and supplies on Facebook, and through fellow Carl Junction school employees, friends and family. Sutherlands supplied a grill. OfficeMax brought in tables. Restaurants including Panera Bread, Granny Shaffer’s and Chicken Mary’s in Pittsburg, Kan., contributed food. “We were open 24 hours a day feeding nurses, doctors, security guards, construction workers — everyone working on the field unit,” Hymer said.
- “We are out here with no place to really go — most of the restaurants got hit, and we would have to travel a distance to get food or a drink,” Hughes said. “We’re so busy, to be able to walk outside the doors and grab a sandwich and get back to work was great. It became a routine for us, and we were very appreciative to not have to worry about that.” Ryan Plummer, manager of St. John’s patient care services, said he visited the relief station frequently. “I’d go there for beverages, for lunch,” he said. “They were very close and handy, and they were so upbeat, so uplifting. It was nice to get away from everything for just a little bit.”



- Cheever and Parish brought the Chow Train mobile food truck from San Antonio, Texas, to support the efforts of AmeriCorps as volunteers provide relief to tornado-ravaged Joplin.

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- “It’s like a big funeral — the first thing people do is bring food,” Sylvester said.
  - On Thursday, they served pulled pork sandwiches and chips. Ron said being able to feed volunteers who are coming in from all over the country has been especially important. “For us to be able to help them has been really great,” he said.
  - “We wanted to give families the opportunity to get away with some peace and quiet and a place to take a deep breath,” Waldenville said. “I can’t imagine what it’d be like to walk through that devastation and see what they saw.”
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**Table A8. Examples of Data Coded as Reritualization/Self-reflective (Concerts, Festivals, Benefits)**

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- For the past 31 years, the annual Joplin PoPs open-air concert has always been a gift of sorts to the people of Joplin. More so this year than most. On the Pro Musica website a message reads: “At a time such as this, with its tragedies and displacements, we hope that an evening of music will lighten everyone’s burden of heartache and exhaustion.”
- Cate Brothers Band headlines benefit
- “I’ve done a lot of amazing gigs in my life, important ones,” Mencia said. “But going to Joplin is way up there. It’s going to be, if not the most important, one of the most important shows of my life.” Mencia will perform Wednesday at Joey Thumbs, at 716 Main St. The stop, booked before the May 22 tornado, is part of a

nationwide, smaller-town tour that Mencia booked specifically to perform for different kinds of audiences, he said.

- Main Street will be closed for June's Discover Downtown Third Thursday event, which includes an art walk, live music, extended restaurant hours and more. Organizer Linda Teeter said that tornado relief efforts by downtown participants have closed off usual gallery spots. But others will be open, she said, including the Chrisman's building at 501 S. Main St. House of Bounce will offer inflatable entertainment for kids, and Walrus will perform at Spiva Park.
- "At a time such as this, with its tragedies and displacements, we hope that an evening of music will lighten everyone's burden of heartache and exhaustion."
- Rockin' Fourth of July, 3 p.m. Monday, Landreth Park. The event includes music, food and fireworks.

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- A group of musicians led by Generationals, a touring act from New Orleans, will headline "HealOK," a tornado relief concert to be held at 7:30 p.m. June 19 at Meacham Auditorium in the Oklahoma Memorial Union at 900 Asp Ave. on the University of Oklahoma campus.
- It was a night of stars. From Blake Shelton to Miranda Lambert to Usher, the Healing in the Heartland benefit concert was all about some of the biggest names in the music industry lending their talents to raise money Wednesday at the Chesapeake Energy Arena.
- The concerts held this past week raised more than \$6 million for tornado victim relief. It's a testament to the power of Oklahoma celebrities to put together such a benefit less than two weeks after the storms. The events, one held at the Bricktown Event Center and one at Chesapeake Arena, brought together a number of entertainers who have ties to Oklahoma. Those who attended the Chesapeake event said it was a magical night that could have sold twice as many tickets had it been held in a larger arena. It was competing against the Paul McCartney concert in Tulsa's BOK Center.

- Thousands were in a fever pitch Saturday as Toby Keith's Twister Relief Concert kicked off at the University of Oklahoma's Memorial Stadium. The sold-out crowd cheered with palpable excitement in anticipation of hearing a star-studded lineup including Keith, Garth Brooks, Trisha Yearwood, Willie Nelson, Sammy Hagar, Ronnie Dunn, Krystal Keith, Kellie Coffey, Mel Tillis and John Anderson as well as Carrie Underwood via satellite from the Grand Ole Opry House in Nashville.
- The University of Oklahoma's Oklahoma Memorial Stadium in Norman will be filled to capacity today for Toby Keith's Twister Relief Concert.
- Those in attendance will be talking about the eight-hour marathon show for years to come. Any time you can hear Brooks sing "Friends in Low Places," Nelson's "Good Hearted Woman" and Keith's "Should've Been a Cowboy," plus many more award-winning songs during the same venue, country music fans know they attended a show for the ages — a show that had a true Okie accent. More than six weeks after the storms and thousands of recovery hours later, we continue to see hope, strength and resiliency in the eyes of those who are rebounding from Mother Nature's wrath.
- Moore War: The 5th annual Moore War Run is at 7:30 a.m. Saturday, Aug. 24. This 5K run through downtown Moore benefits the scholarship funds for Moore and Westmoore. This run is sanctioned by the USATF and timed with ChampionChips.
- The city of Moore held its annual children's fishing derby recently. This year, the event at Buck Thomas Park featured a special tribute to those affected by the May tornadoes. The Tackle the Storm Foundation handed out rods and reels to tornado survivors attending the derby, and several bass fishing professionals visited the event to share fishing tips with participants. Derby organizers said about 250 children took part.

**Table A9. Examples of Data Coded as Reritualization/Self-reflective (Pets)**

<i>Joplin</i>
<ul style="list-style-type: none"><li>- To date [<i>June 3</i>], 296 pets have been reunited with their owners, Rohr said</li><li>- More than five weeks after the May 22 tornado, the Joplin Humane Society has no more adoptable “tornado pets.”</li></ul>
<i>Moore</i>
<ul style="list-style-type: none"><li>- “So many animals have been successfully reunited with their loving family”, said Gayla Seshier, animal welfare supervisor for the City of Moore. “But the remaining animals deserve their opportunity at a second chance with a new family who will care for them and love them unconditionally.”</li><li>- “All animals brought to the shelter are to be considered tornado animals until further notice,” said Public Works Director Richard Sandefur. “The only exception is the citizens that are owners and wish to sign over the animal to us.”</li><li>- Oklahomans banded together once again for a rescue of a different sort on Sunday afternoon; one that involved wagging tails and the occasional “meow.” Hundreds of people lined up at the Cleveland County Fairgrounds for a pet adopt-a-thon to help the animals who were displaced by the Moore tornado on May 20.</li></ul>

**Table A10. Examples of Data Coded as Reritualization/Self-reflective (Photographs and Memorabilia)**

<i>Joplin</i>
<ul style="list-style-type: none"><li>- “I believe I have 30 photos I have delivered to people,” Almandinger said, as well as an additional dozen photos that have been identified and will be returned as</li></ul>

soon as she can contact the known owners. She has put up 267 photos on her own, and others have posted 100 or so photos on the same site.

- “It’s one little picture — but it means a whole lot,” McPherson said. “It’s one little piece of my normal life I’ll have back.”
- “It was of me and my grandkids, and it’s priceless,” Tignor said. “My folks now have a battered yet clear photo of my brother and me from our middle school days. I am so grateful to the unknown person who found it and turned it in.”

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- Offering hope for storm-damaged computers and other digital devices, The Computer Rescue Team is a group comprised of local computer experts, the City of Moore Public Library and one of the world’s premier data recovery labs and hard drive manufacturers. Our goal is to help people recover digital data, such as family photos and other personal files, from devices damaged in the recent tornados that struck Oklahoma. Devices include items such as desktop, laptop and tablet computers, cell phones, digital cameras, etc. The service is free of charge to tornado victims.
- Thousands of photos scattered by recent tornados in central Oklahoma have been recovered and will eventually be scanned into an online database for owners to view and claim. During the May 19 and 20 tornados in central Oklahoma, pictures were picked up from people’s homes and thrown all over the state, taking memories of life before the twister’s devastation with them. “We will have reunification dates where they can come and look at them, but that’s phase two or three,” she said. “We’ve got to get them off the ground first — that’s why it’s so urgent for us to do this now.”

**Table A11. Examples of Data Coded as Reritualization/Self-reflective (School Year)**

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- “It’s as therapeutic for the kids and families as it is for us,” said Huff, who had pledged within days after the tornado that school would start on time. “We need the kids to be back in school. It’s healthy for us. It’s what we do. We’re in the kid business. Without kids, we don’t amount to a whole lot. We’re just an empty shell. Getting those kids kind of completes us and gives us our purpose. I’m excited about that.”
- “We feel we owe the town of Joplin something,” Threatt [*MSSU football coach*] said. “Any town that’s been through what Joplin is going through right now is pretty dramatic. When you go out on community service, you realize how much pain there is. We’re just ready to get the season going and try to help out the community,” Smith said. “Every Saturday they can come out and get a break from a crazy schedule ... three hours on Saturday they can just come out and have some fun and cheer us on. We’re not just playing for us. We’re trying to put the community on our backs, try to help them pull through by playing good football.”
- “I think it’s going to be a great year,” Johnson said. “Although the tornado was so bad, it’s brought great opportunities for the years to come. I’m glad I still get to be here to see the start of it. I was scared our senior year was just going to be cubicles in the mall. It shows how many people care about our education. I’m so grateful.”
- The weather cooperated Wednesday night as thousands of Joplin area schoolchildren and their families converged on the Missouri Southern State University campus for the I Am Joplin event. The event aimed to reconnect students with their classmates and educators before the first day of school on Aug. 17 and in the wake of the May 22 tornado. “(The students) wanted to come mainly because they wanted to see their teachers, and I think for them it’s just more of a normalcy,” said Rhonda Scroggins, who attended with her family. “They’re getting excited about school,” she said. “It means a lot for them and for the community. It’s a nice way to make it a little more normal.”

- "It's going to be a good day," she said. "These are tears of joy."
  - Mixed emotions marked the first day of school across the district, where students and teachers were reunited for the first time since the twister caused \$55 million worth of damage to 23 of 36 campuses and ended the school year prematurely.
  - "For some of them, it was more of a struggle than for others," Moore Public Schools spokesman Jimi Fleming said. "For us, this was the beginning of our moving forward, and that's what we've been shooting for all along."
  - Down the road at Emmaus Baptist Church, enthusiastic Briarwood Elementary School teachers and administrators welcomed back excited students and anxious parents with big hugs and broad smiles.
  - "We're going to be a lot more tolerant because everybody is handling the situation differently, even the teachers are, they're just as nervous coming back," she said.
  - The principal invited parents to stay as long as they needed to comfort their children, who were greeted by upbeat music and Thunder mascot Rumble the Bison. "I want it to be a safe place again because when they left, that was shattered," she said.
  - "The focus is really about moving forward and finding our new normal," Fleming said.
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VITA

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